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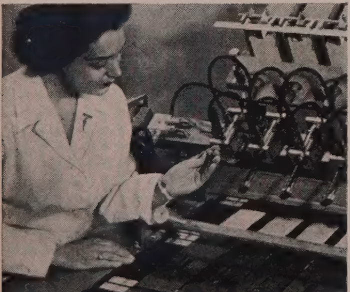

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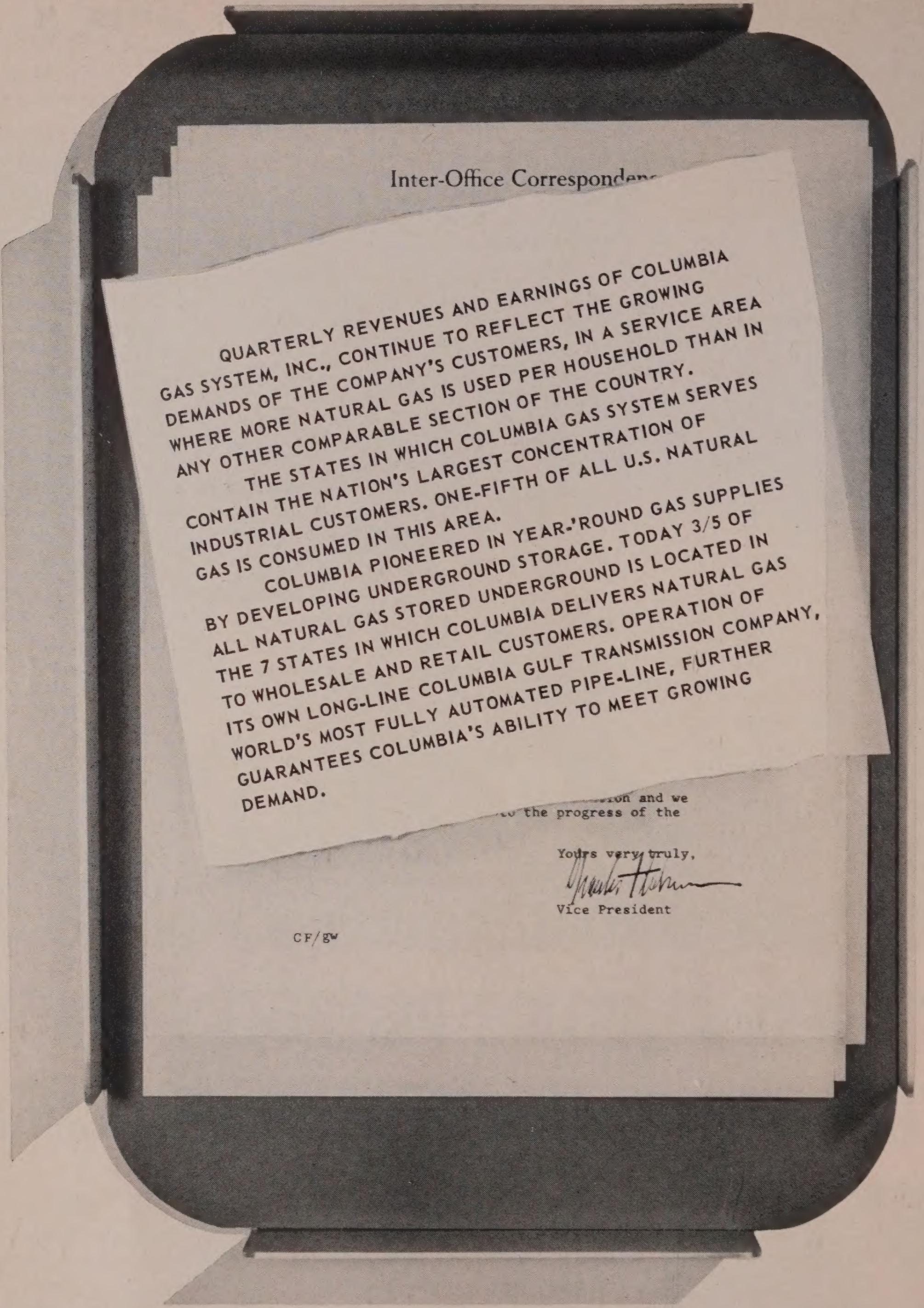

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Advertising Executive Acclaims Financial Analysts

Glowing tribute to our twenty-five Financial Analysts Societies was paid recently in a half-page advertisement in The New York Times.

In the ad, sponsored by Dow Jones' famed Barron's magazine, William B. Lewis, board chairman of Kenyon & Eckhardt—one of the nation's leading advertising agencies—said:

> "Every time a corporation's Annual Report arrives on my desk, I shudder a bit. I know I am going to read it; I know that the financial facts will be correct; but I also know that the accompanying text will be so legally circumscribed and so surrounded by caution that I will not get the vivid and dramatic story that often lies behind the bare facts of financial progress.
>
> "By accident, I have learned a solution to my problem, and I willingly pass it along for your edification. Instead of wading through the Annual Report, find out if the corporation Chairman or President has addressed [one of] the Societies of Security Analysts. If he has, obtain a copy of his talk by hook or crook, and settle back for some fascinating reading. There is no dull or double talk here. Before these financial advisers, the corporation executive is willing to take his hair down and talk about his aspirations — the corporation's long-range plans for expansion and diversification, its present and planned research programs, the thinking of management, changes in organization, the doing of competition—in short, the things you want to know.
>
> "Corporation executives seem willing and even eager to pour out their souls to the limited segment of the financial community represented by Security Analysts. It is a shame that more of them do not tell their stories—in like manner—to a broader audience of investors and stockholders through corporate advertising campaigns."

Now, we'd not go so far as Chairman Lewis, (though his words will continue to warm our hearts) in a blanket indictment of corporate annual reports, for we've seen many annual reports that are indeed also a tribute to the organizations which published them.

Still, it's unfortunately true that there are many annual reports which could stand improvement. However, being "historians," of a sort ourselves, we also know that our favorite publication could stand improvement. So our tolerance is legend.

And, as for the annual reports which have shown informative improvement over the years, we hope that it's been a happy amalgam of constructive criticism on the part of Financial Analysts, and an overall sign of the times.

The Federation's Corporate Information Committee has continued to work for the improvement of information provided by corporations to Financial Analysts, stockholders, and the investing public. Most of the work is concerned with studies of the annual reports of companies in important industries, together with recommendations of how they could be improved from the standpoint of the Analyst.

This year marked the twelfth time that our National Federation issued an "Annual Report of the Corporate Information Committee"—members of which are: Albert Y. Bingham, financial vice president of Chicago Title & Trust Co., chairman; F. W. Elliott Farr, vice president of Girard Trust Corn Exchange Bank, Philadelphia; Donald B. Macurda, general partner of F. S. Smithers & Co., New York; Gilbert H. Palmer, vice president of National City Bank of Cleveland; Paul A. Pflueger, Jr., financial vice president of Title Insurance & Trust Co., Los Angeles; and Linwood E. Savage, Jr., vice president of New England Trust Co., Boston.

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Looking Ahead with Phillips Petroleum . . .

AN EXAMPLE OF GROWTH BASED ON RESEARCH

Phillips Petroleum Company began putting science to work in company laboratories very early in its history. Back when natural gas was still being flared as a "waste" product, Phillips scientists were discovering new, profitable uses for it and the liquids extracted from it. Acting upon this knowledge, Phillips management amassed huge reserves of natural gas when it was still generally considered to be of little use.

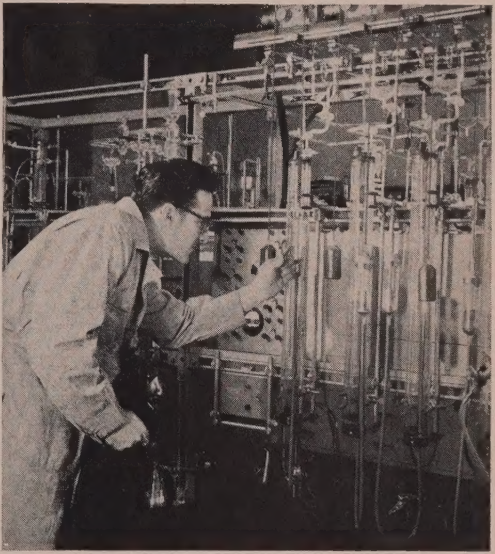
With this foundation of raw materials and technology, Phillips has attained a commanding leadership in natural gas, natural gas liquids, and petrochemicals. This base has been especially valuable in the chemicals field, where intense competition permits a nod of success only to companies with supplies of the proper raw materials and the know-how assembled from long experience and research.

From Phillips intensified emphasis on research and development through the years came many notable, profitable discoveries or developments. Among these are "cold" synthetic rubber; oil furnace carbon blacks; HF alkylation and other refining processes; high density polyolefins, trademarked Marlex; and all-season motor oils.

Three times the company has won the coveted "Chemical Engineering Achievement Award" for its research and development accomplishments, once by itself and twice in group awards.

Although research solves problems and develops know-how, an important measure of its results is patents. For many years Phillips has ranked second in number of patents issued and in total number of U. S. patents owned among all U. S. oil companies. The most recently available figures show Phillips ranks eighth in this respect among companies in all industries in America.

Intensive and consistent research effort has equipped Phillips with a qualified and dedicated research and development team. Although many of Phillips 3,000 scientists and engineers are located at the modern Phillips Research Center near the company headquarters in Oklahoma, others may be found in vital centers elsewhere. These people are thinking and working not only on exciting and challenging projects for the years ahead, but also to make existing operations more profitable and to quickly commercialize newly developed processes and products. In short, their emphasis is upon converting ideas into earnings.



One of the most recent major petrochemical achievements of Phillips research is cis-polybutadiene rubber, trademarked Cis-4. Extensive tests have shown this rubber to be superior to natural rubber in tire tread wear and in other important qualities, including blowout resistance and traction on snow and ice. The company's 25,000 ton per year Cis-4 plant has commenced production. The process has been licensed to others both in the U. S. and abroad.

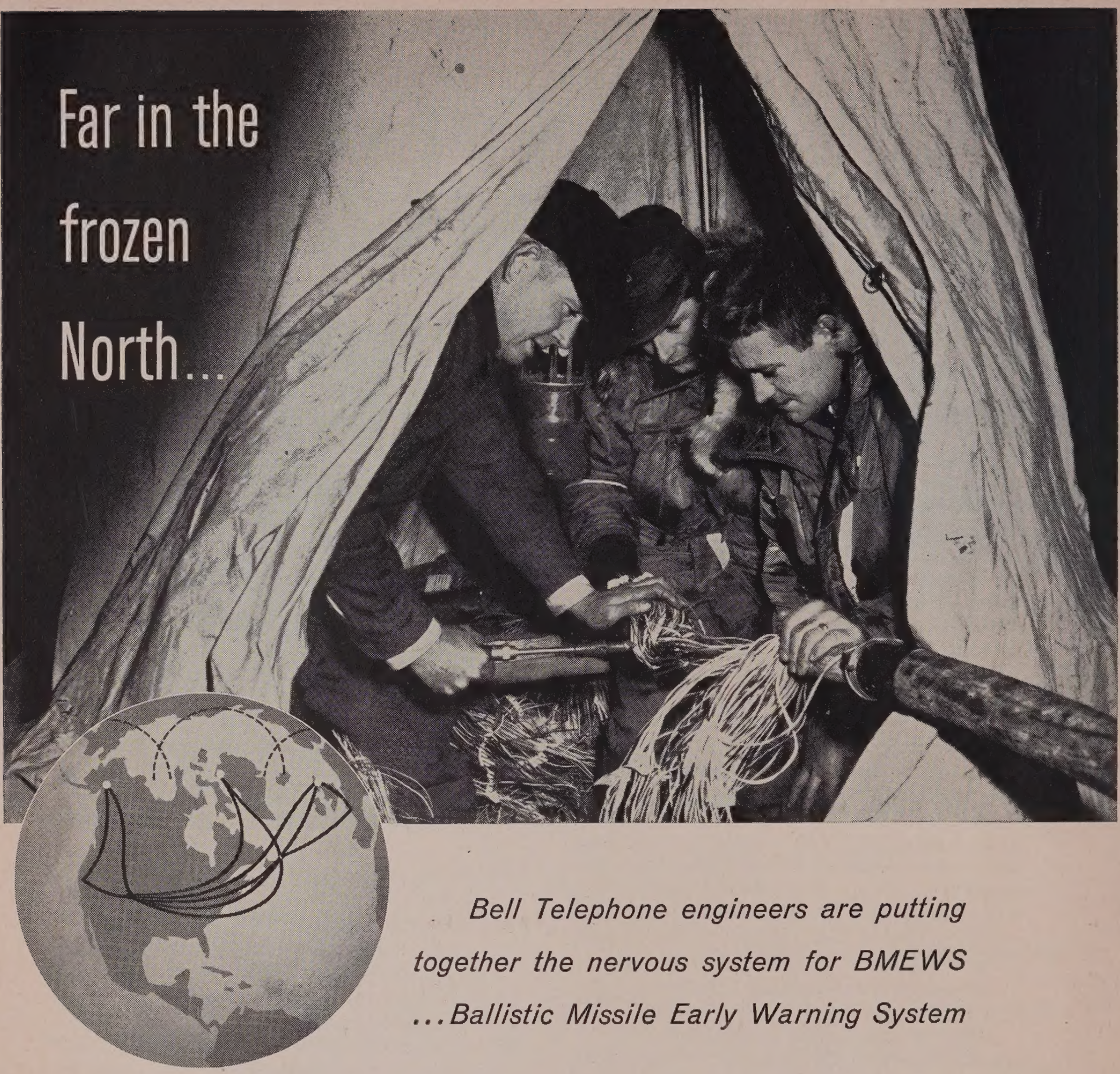
There is always an undisclosed backlog of discoveries and inventions to which Phillips scientists are giving "finishing touches" prior to commercialization. Some now or soon emerging are a new jet fuel additive solving a vexing aircraft problem, a new polypropylene process, and a better seismic prospecting method.

Research is one reason for "Looking Ahead With Phillips."

PHILLIPS PETROLEUM COMPANY, Bartlesville, Oklahoma

PHILLIPS 66

Far in the frozen North...



Bell Telephone engineers are putting together the nervous system for BMEWS ...Ballistic Missile Early Warning System

The eyes of the U. S. Air Force BMEWS will be massive, far-seeing radars in Alaska, Greenland and Great Britain. The brain is at the Continental Air Defense Center in Colorado Springs. Between eyes and brain there will be a vast network to provide instantaneous, highly reliable communications in the event of enemy missile attack.

The Bell System's manufacturing and supply unit, Western Electric, heads a team of 30 private firms and government agencies from three countries which is constructing this communications system.

Work is going ahead at full speed, right on schedule. All of the arts of long distance communications are being used to conquer the stern, hard-bitten terrain of BMEWS—line-of-sight and over-the-horizon radio, cables on land and under water.

Several forms of transmission are being employed. Newly designed high-speed data channels will feed information to computers. Voice and teletypewriter links will also be available.

One important reason the Bell System was given this assignment was its demonstrated capacity to handle such a challenging task. The resourcefulness and skill shown in this and other defense projects are also responsible for the efficient, continually improving telephone service you enjoy every day.

BELL TELEPHONE SYSTEM

1961: An Industrial and Stock Market Forecast For Canada and the United States

by John A. Boyd, Jr.

WITH THE APPROACH OF EACH NEW YEAR the urge within a Financial Analyst to forecast the trend for that year is well nigh irresistible, although by the year end he may wish that he had been less venturesome and left pen and prediction alone. The forecast, once given, casts an image which cannot be tempered month by month as the economic picture slowly and relentlessly unfolds. Nevertheless, forecasting is an integral part of the Financial Analyst's job, although it must always be remembered that such forecasts cannot be proved in the manner of a mathematical problem and that the forecaster's own bias colours his prediction—no matter how great the attempt at impartiality.

It is this writer's opinion that North America is currently experiencing a recession which, before it is over, will probably spread to all of Western Europe. It is unlikely to be a severe recession by pre-war standards; but even so it will probably be the most severe of the post-war period. Recovery from the recession will be slow because a sharp increase in consumer demand will fail to materialize. Certain pre-war problems will emerge once again, the most serious of which will be that of unemployment. The chief depressant to the United States economy will be declining inventories, while a sharp drop in foreign trade will be the major depressant in Canada. Investors who are already becoming increasingly wary, will tire of paying substantial premiums for growth stocks which do not grow and will revalue them accordingly.

Looking at the broad general picture we find in North America today an excess of industrial capacity in a majority of industries; a consumer who is becoming increasingly hesitant in making expenditures, but at the same time is not hesitating to take on a greater burden of debt; a failure of corporation profits to keep pace with sales; a cost structure in industry which is probably the highest in the world; an increasing problem of unemployment and a level of capital expenditures which is failing to hold up to earlier estimates. In brief, while the economies of the United States and Canada are operating at or close to a record level, both, nevertheless, appear to have lost many of the dynamic qualities that have been so characteristic of them over the post-war period.

While personal income and over-all consumer expenditures have continued to rise in the United States, wages and salaries have recently shown some weakness and the average number of hours worked each week in the manufacturing industry has exhibited weakness during most of 1960. The index of industrial production, seasonally adjusted, has declined from 110 in July to 107 in October, and gives every indication that a further decline will take place in November[this article was written in October 1960] as the impact of the cut-backs in the automobile industry is felt throughout the economy.

GNP Drop May Continue

Gross National Product fell 0.4% in the third quarter, dropping from \$505 billion to \$503 billion and it seems likely at this point that the drop will be further extended in the final quarter of the year. Since June, inventory liquidation has taken place. Ordinarily, if the value of business sales had remained relatively constant, the current high inventory position could be worked off reasonably quickly. Unfortunately the value of sales has declined considerably more rapidly than inventories with the result that the ratio of inventories to sales has actually increased from 1.48 in April to 1.55 in September. The availability of credit has recently expanded significantly, particularly for use in such key areas as residential construction; but residential construction, which has hitherto been one of the main contra-cyclical weapons of government, gives every appearance of being over-expanded.

The outflow of gold from the United States is without doubt serious and certainly cannot continue indefinitely; but to increase its price would be merely to compound the problem which such an increase was aimed at overcoming. Devaluation of the United States dollar would of necessity result in a similar devaluation of all other currencies in the Western World, create confusion and a loss of confidence, and finally leave the position exactly where it was before devaluation. Remedies to cure the malady of a continuous outflow of gold there are, but they will not be pleasant or popular and may eventually require some control and restriction in the current heavy flow of United States investment funds abroad. Thus, while the condition of gold outflow is fraught with problems yet to be solved, no monetary crisis is likely to develop at the present time.

In Canada, by contrast, the recession commenced somewhat earlier than in the United States and is thus more readily apparent. In Canada, as in the United

---

John A. Boyd, Jr., is a partner with the Toronto investment firm of Andras, Hatch & McCarthy. A graduate of Queens University, Mr. Boyd spent several years with Lazard Brothers & Co., Ltd., London merchant bankers. He is a member of The Security Analysts' Association of Toronto.

States, consumer expenditures have continued to rise but personal income on a seasonally adjusted basis fell by 0.4% in the second quarter of 1960 and Gross National Product experienced a sharp decline of 1.6% in dropping to $35,048 million. The Canadian index of industrial production at 167.7, the seasonally adjusted September figure, is off some 3.3% from a high of 173.5 experienced in January. Total bank deposits and currency in circulation in Canada have expanded significantly in 1960, rising by $518 million to $13,642 million in the first 10 months of 1960 for an increase of almost 4%. Much of this increase in the money supply remains available for the creation of loans if and when the demand arises.

Housing on the Down-Grade

Residential construction has been in a down trend since 1958, and in the first 9 months of 1960 housing starts were running more than 31% below the level of a year ago. As in the United States, residential housing appears to be in a definite over-supply position which is likely to continue for some time. In certain areas, such as department store sales, consumers appear to be increasingly hesitant and it is difficult to see what will prompt the consumer here and in other fields to increase his expenditures significantly above current levels. After having made up for the deprivations of the 1930's and the scarcities of the war and immediate post-war years, the consumers' appetite appears to be reaching a point of temporary saturation.

Much comment and discussion has been given to the enormous increase in the birth rate that has taken place since the end of the war. Great reliance is being placed on this increased population to provide an unparalleled expansion in consumer demand. This no doubt will be true in time, but much of the thinking of the "golden sixties" has been somewhat premature in timing. This increased population has already made its weight felt in its demands for social capital, but it will *not* contribute significantly to any increase in family formations before 1965, or to the enormous demand for consumer durable goods that would accompany such formations.

Meanwhile, this increased population will be flowing into the labour market almost immediately, and at a time when the economy will be tending to be relatively static. The problem of assimilating this expanding labour force will be a major one and its effect will tend to depress the economy rather than to give it support over the next few years.

Table I

Civilian Labour Force and Unemployment in Depression and Recession

	UNITED STATES		CANADA	
	Civilian Labour Force (millions)	% Unemployment	Civilian Labour Force (millions)	% Unemployment
1933	51.6	24.8%	4.3	19.3%
1938	54.6	19.1	4.6	11.4
1946	57.5	4.0	4.8	2.9
1949	62.1	6.0	5.1	2.6
1954	64.5	5.6	5.5	4.3
1958	68.6	6.9	6.1	6.6
1960 x	71.1	6.4	6.5	7.6

x Seasonally adjusted figure for October 1960.

With over-capacity, narrowing profit margins and the trend in industry towards increased automation, unemployment, which has recently been growing increasingly serious, shows every sign of becoming chronic and developing into a major social and economic problem for the next few years. In the past, conditions of reduced economic activity have tended to produce a higher level of average annual unemployment in the United States than in Canada. Since the recession of 1954 this spread in the unemployment figures has tended to narrow until now the Canadian figure is higher than that in the United States. This change in the relationship of unemployment between the two countries is perhaps a further indication of the increasing vulnerability of the current Canadian position. *Table I* brings out this change in the past trend of unemployment. A prolonged condition of high unemployment is likely to have a damaging effect, not only on investor psychology, but also on business sentiment generally.

Although the economies of the United States and Canada are often assumed to move in concert, such is not always the case, as is shown in *Table II*. The swings in economic activity, as measured by Gross National Product, frequently vary considerably in magnitude and sometimes even in direction. Such differences are accounted for by the different forces at work in each economy.

Foreign trade is a most important factor in the Canadian economy, with exports accounting for more than 19% of G.N.P. as against 3.6% in the United States. The bulk of Canadian exports are concentrated in a few natural resource products which at the present time

Table II

Changes in Gross National Product During Periods of Reduced Economic Activity

	UNITED STATES		CANADA	
	Change in G.N.P. (billions of dollars)	% Change	Change in G.N.P. (millions of dollars)	% Change
1929-1933	$104.4 to $ 56.0	— 46.3%	$ 6,134 to $ 3,510	— 42.9%
1937-1938	90.8 “ 85.2	— 6.2	5,257 “ 5,278	+ 0.4
1945-1946	213.6 “ 210.7	— 1.4	11,835 “ 11,850	—
1948-1949	259.4 “ 258.1	— 0.5	15,120 “ 16,343	+ 7.5
1953-1954	365.4 “ 363.1	— 0.6	25,020 “ 24,781	— 4.6
1957-1958	442.8 “ 444.2	+ 0.3	31,773 “ 32,509	+ 0.2

are in a state of world over supply and give every indication of remaining that way for some time.

In 1959 Canadian exports amounted to $5,022 million and of these 42% were concentrated in five basic natural resource commodities, these being in order of value, newsprint, wheat, lumber, uranium, and wood pulp. During the first nine months of 1960 wheat exports have fallen 11.3% below those of a year ago. This declining trend will continue if, as seems likely, the new administration in Washington makes a concentrated effort to reduce the gigantic surplus of wheat now being stored in the United States. In the case of Canadian exports of uranium, these are due to decline to the vanishing point within a very few years. By the third quarter of 1960 exports of uranium had already fallen 11.8% from levels of a year ago. Other major exports are in an equally precarious position, thus increasing the potential to expand the already serious deficit incurred from an excess of imports over exports in international trade.

The position of the Canadian balance of international payments, referred to above, is quite critical. Huge deficits on current account, amounting to $1,429 million in 1959, are being financed through an inflow of investment capital. The inflow of capital into Canada for development purposes has resulted in an exceptionally high level of imports since 1955, causing a deficit from merchandise trade of $380 million in 1959 and which now stands at $222 million for the first half of 1960. In a recession and at a time when natural resources are in world over supply, the flow of outside capital into Canada may well diminish, resulting in a drop in imports. Even so, imports would probably not diminish sufficiently to cover the deficit now being realized on balance in foreign trade.

Canadian Dollar Situation

Should the heavy inflow of capital into Canada be sufficiently curtailed, the Canadian dollar would drop to a substantial discount in relation to the United States dollar and the basically serious position of the Canadian balance of international payments would be more readily apparent. The exceptionally heavy inflow of capital into Canada in the post-war period is a problem in its own right. In 1959 Canadian net international indebtedness amounted to $15.4 billion, having increased by $10.3 billion since 1952. This investment requires servicing, which in 1959 amounted to $656 million in payment of interest and dividends. In time, as earnings increase and are repatriated, the servicing of this foreign investment will become extremely awkward. This problem could arise immediately if the economic outlook in Canada were to become sufficiently unfavourable.

Capital expenditures in the United States and Canada have been revised downwards several times during 1960 but, nevertheless, are due to reach an all-time high in both countries. Over-all expenditures in 1961 should hold up reasonably well and should not be materially lower than in 1960. However, residential construction will be significantly less important in 1961 in making up the total figure for capital expenditures. Expenditures on the part of industry will likely also show a tendency to decline part way through the year. Increased expenditures by government should largely make up for these declines. In Canada total capital expenditures will benefit from the continuing capital expansion programmes of the major electrical utilities and the new developments taking place in the natural gas industry.

Stock Market Outlook Gloomy

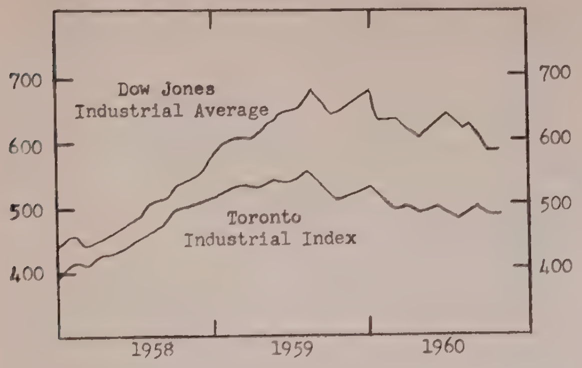
With a moderately sharp adjustment taking place in the economy—and indications that corporate earnings may fail to show any signficant expansion for several years—the outlook for the stock market as a whole is none too encouraging. It is likely that 1961 will be that most talked of year when investors take a long second look at the growth potential of stocks for which they have paid a substantial premium and which have to date failed to show the continuously expanding earnings that prompted their purchase. A downward revaluation of the price-earnings ratios of common stocks by investors would in itself bring about a sharper decline in stock prices than most investors would care to think about. Should the recession, discussed above, turn out to be either more severe or significantly longer in duration than anticipated, then a revaluation of common stock prices could take place which would be sharper than one based only on an adjustment of price-earnings ratios.

To see the vulnerability of the current position of stock prices to any downward revaluation of price-earnings ratios, it is best to go back and examine some of the highlights of the 1949-1960 bull market. At the beginning of this 124 month bull market (the longest on record) the Dow Jones Industrial Index was selling at 6.9 times earnings and yielded 7.9%. Standard & Poor's Index of 425 industrial stocks at that time was selling at 5.5 times earnings to yield 8.6%.

Obviously, at the begining of the longest bull market in modern times, investors did not think highly of the prospects for common stocks; but then that is typical at a market bottom. Even by 1953, after an almost 70% rise in the Dow Jones Industrial Average, stocks were selling at only 9.4 times earnings. The Standard & Poor's 425 Stock Index had in this time risen by some 88% and was selling at 9.5 times earnings. By both standards of measurement, stock prices were still reasonable in 1953 and were not yet anticipating earnings years in advance of their being realized. From 1953 on, stock prices began to advance swiftly, with the advance being increasingly related to the anticipation of future earnings. The discounting of future growth was warranted in certain cases, but for the market as a whole the increase in stock prices far outstripped any increase in corporate earnings. Under present static conditions the time is receding even further into the future when the growth in earnings will justify current prices.

That the growth in earnings has not matched the rise

Comparison of New York and Toronto Stock Markets



in stock prices is a matter of record. From the low in 1953 to the all-time high early in 1960, the Dow Jones Industrial Average advanced from 255.5 to 685.5, or by 168%. During this same period, earnings on the Average increased from $27.23 to a current projected rate for 1960 of approximately $34.00, representing an increase of only 25%.

Bullish Psychology Dies Slowly

Expressed in other terms the advance in stock prices was some 6.75 times the increase in earnings. Using the Standard & Poor's Index of 425 Industrial Stocks does not alter the story significantly. In this case stock prices increased by 165% in the period from 1953 to the market high of that index in mid 1959, but earnings increased by only 37%. Here the advance in price was 4½ times the advance in earnings. In 1959, earnings of $3.53 on the Standard & Poor's Index of 425 Industrial Stocks were less than the 1955 level of $3.78. In 1960 earnings in the second quarter on a seasonally adjusted basis were down to $3.44. All in all the relationship between stock prices and corporate earnings leaves a great deal to be desired.

The substantial premium paid by investors for growth has not been justified in the majority of cases, but the bullish psychology of a 124 month bull market dies slowly and reluctantly. That it is at last about to die seems fairly probable in view of the change in economic climate from one of rapid expansion and rising demand to one in which growth is not an automatic factor and surpluses rather than scarcities abound. The adjustment of price-earnings ratios will not necessarily be accompanied by any heavy liquidation of securities on the part of investors. Rather it is more apt to come from a lack of over-all buying causing stock prices to move downwards slowly and hesitantly.

As will be noted in the accompanying chart, the market action of the Toronto and New York Stock Markets tended to diverge increasingly from September 1958 on, with the Toronto market failing to experience the substantial rise in stock prices that was enjoyed by New York investors. This poor performance by the Toronto market is traceable to the periodic heavy selling of Canadian securities on the part of some large institutional investors in the United States. The sheer size of some of this selling, its persistent character and the thinness of the market in Canadian securities, has resulted in a persistently weak market which has not endeared it to investors, either domestic or foreign.

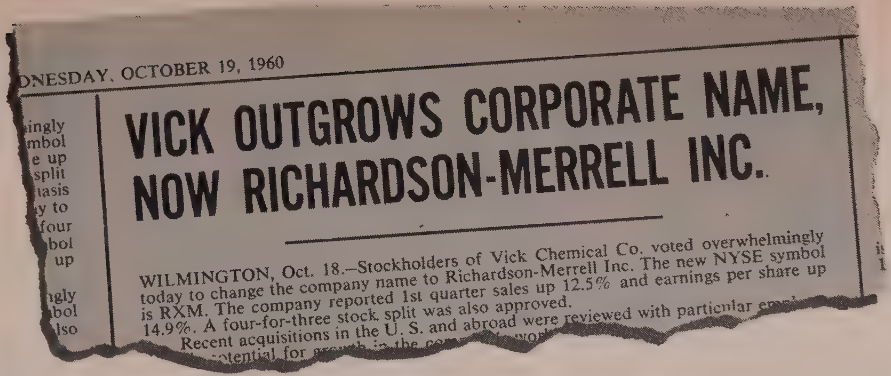
The probable result of this poor market action is that Canadian stocks have likely experienced much of the adjustment that has yet to take place in New York. In passing it is interesting to note that presidential elections do not tend to favour constructive market action, as five of the eight major bear markets, since 1900, commenced within 12 months of such an election. At a time when we are standing at the crossroad this statistical coincidence is worth pondering.

If investors were to revalue earnings to the extent that 14 times earnings became the norm, then a price of between 475 and 500 on the Dow Jones Industrial Average could be expected. Even at that level the yield of approximately 4¼% would not be particularly generous. However, if the current economic let-down develops into a recession of more serious proportions than currently anticipated, it would certainly not be impossible to see one half of the 1949-1960 bull market retraced, leaving the Dow Jones Industrial Average at 419.85. This by chance is only six cents above the low point of 419.79 experienced in the 1957 decline.

ON THE THRESHOLD OF ADJUSTMENT

To sum up then, North America is on the threshold of an adjustment to both the economy and the stock market. Because of over valuation, the correction to the stock market should be considerably more severe than that to the economy. With a persistent lack of growth in corporate earnings and an increasing burden of chronic unemployment, the popular use of the phrase "growth stock" will sound more than a little hollow and will disappear from the Financial Analyst's jargon. Investors will tend to buy stocks for their current value and prospects rather than the intangible future. Consideration of yield will be increasingly important, particularly among small investors, although for tax reasons it will not regain its former pre-war prominence.

It is never pleasant to be pessimistic but the Financial Analyst must be critical if he is to fulfill his proper role and function for the investment community. Without wishing to moderate any of the above opinions, the writer hesitates to leave readers with the nasty taste of hopeless pessimism. Every decline in the market, no matter how great, is eventually reversed and this time will not be different. At the bottom of the forecast decline in stock prices, exceptionally good values will be available as many of the short term negative factors gradually become positive over the longer term. Consumer demand and expenditures will expand enormously as a direct result of the rapidly growing population, but it is the latter half of the decade of the 1960's that will be golden and fabulous.



DNESDAY, OCTOBER 19, 1960

VICK OUTGROWS CORPORATE NAME, NOW RICHARDSON-MERRELL INC.

WILMINGTON, Oct. 18.—Stockholders of Vick Chemical Co. voted overwhelmingly today to change the company name to Richardson-Merrell Inc. The new NYSE symbol is RXM. The company reported 1st quarter sales up 12.5% and earnings per share up 14.9%. A four-for-three stock split was also approved.

Recent acquisitions in the U. S. and abroad were reviewed with particular em

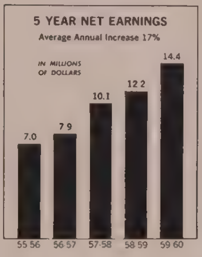
potential for

Facts behind the headlines — How Vick outgrew its name

In 1937, Vick marketed three colds products under the *Vicks* trademark. Today, as the result of a continuing diversification program, the company has eleven operating divisions in all four major segments of the drug industry—ethical drugs prescribed by doctors, veterinary drugs for animal health, proprietary drugs advertised to the public, and chemicals used in drugs and other industries. All four segments have shown continued growth. Ethical and veterinary sales have grown fastest, moving up from 29% of sales five years ago to 43% today, larger than total company sales only eight years ago. Obviously, the Vick name, so familiar in proprietary drugs, has been outgrown as the corporate name. In the future, it will be used as fully as ever on proprietary products but the overall company becomes Richardson-Merrell Inc., combining names used in the drug industry for 75 and 132 years respectively.

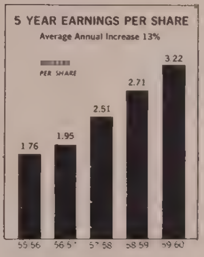
Growth in good times and bad

With its broad-based diversification in the recession resistant drug industry, the company has grown steadily in both sales and earnings, even in the depression years of the 30's. During the last five years, net earnings have increased at an average annual rate of 17%, and per share earnings at an average rate of 13% a year. Sales for the fiscal year ended last June 30 were $132 million, up 14.8% from last year. Net earnings were up 18.3% to $14.4 million, and per share earnings up 18.8% to $3.22. Both sales and earnings have continued to rise in the first quarter of this fiscal year.



5 YEAR NET EARNINGS

Average Annual Increase 17%



5 YEAR EARNINGS PER SHARE

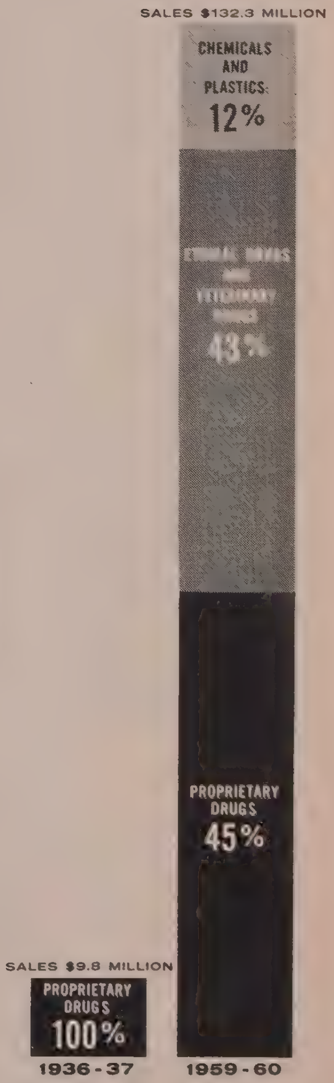
Average Annual Increase 13%

Foundations for future growth

These are the factors in growth, past and future:

1. **Broad drug diversification,** permitting growth in all areas without being unduly dependent on any one.
2. **Acquisition of companies,** continuing a program started in the 30's, with five companies acquired in the last two years.
3. **Ample capital** to finance expansion and acquisition of companies, with uninterrupted dividends since 1925.
4. **Research and development,** with research expenditures tripled in the last five years to $4.8 million.
5. **International expansion** through greater sales of products marketed in 117 countries, development of new products, acquisitions.
6. **People for growth**—experienced management for an expanding enterprise through decentralization and executive development.

COMPANY'S GROWTH AND DIVERSIFICATION IN ALL DRUG AREAS 1937–1960



For a copy of the annual report, please write to: Dep't E Richardson-Merrell Inc., 122 E. 42nd Street, New York 17, New York

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The National Drug Co.
Merrell-National (Overseas) Laboratories Division
Walker Laboratories, Inc.

Chemicals and Plastics

J. T. Baker Chemical Co.
Extruded Plastics, Inc.

Proprietary Drugs

Vick Chemical Co. Division (including *Vicks* trademarked products, *Lavoris, Clearasil*)
Vick International Division
Vick Manufacturing Division

Veterinary Drugs

Hess & Clark Division
Jensen-Salsbery Laboratories, Inc.

SERVING MODERN HEALTH NEEDS—WORLD-WIDE

DARKNESS... THEN THE DAWN

Norfolk's day is dawning. The momentous task of redeveloping the blighted sections of downtown has begun. Building a brighter tomorrow, Norfolk is investing 182 million dollars to equip and re-build over 500 acres of real estate. The slums of yesteryear are being replaced by modern construction.

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PRODUCERS OF SAND, STONE, GRAVEL CONCRETE CONCRETE PRODUCTS

European Markets in 1961: A Challenge

by N. D. Kenadjian

WESTERN EUROPE is entering its second year of the 1960 decade not only with great hopes and expectations in the field of future economic expansion, but also with a justified pride arising from important achievements to date.

Momentous decisions have been taken by progressive and far-sighted European leaders towards the economic integration of Western Europe. The only cloud in this picture is the existence of two rival groups: The European Common Market and the Free Trade Area. Nevertheless, compromises are being studied to bridge the important gaps now separating these two groups, and the huge single market of over 250,000,000 consumers will become a reality.

In the past, the average European manufacturer has had the difficult and complicated task of satisfying the manifold needs of only a limited market, consequently despite the lower wages he paid his workers, his products were not cheaper than those of his American counterpart. The limited markets, each demanding variety for consumer selection with respect to style, sizes and quantities within a relatively small volume, has discouraged adoption of mass production and marketing. Now with the prospect of the eventual removal of all artificial barriers, such as customs duties, import licenses, etc., the European manufacturer, in order to reduce his cost of production, is turning gradually towards the proven American methods of mass production and mass distribution.

The step-by-step introduction of mass production and marketing with up-to-date and efficient methods, has been steadily improving his competitive position. The traditional American margin of superiority in productivity, which has helped the American manufacturer and exporter maintain a strong hold on world markets, is being most seriously threatened.

A Challenge to the U. S.

These new developments in the field of economic competition could well lead to the gradual elimination of American products from the world markets, and even the well entrenched positions in Central and South America will not be immune and safe as in the past.

The managements of many American companies interested in world markets are well aware of these new market opportunities in Western Europe and are taking steps to benefit from them. However, the dangers that these same positive factors will bring are not always understood. Yankee ingenuity, coupled with mass production and mass marketing methods, have up to now kept us a few years ahead of the other major industrialized nations, but we cannot always hope that they will work wonders to maintain that lead.

While we in the United States are great believers in Yankee ingenuity, the capabilities of West European industrialists should not be underestimated. The main reason why the European manufacturer was lagging behind has been already mentioned. Under a changed set of conditions, with larger markets to serve, and with the application of American methods, there is no reason for him not to be able to catch up and take an increasing share of world markets.

Many American firms with substantial export activities are finding it more and more difficult to maintain past volume. Their managements might be well advised to look into the reasons which created this new situation and we feel sure that they would find West European competition is one of the main reasons. Consequently, the possibilities of producing abroad in or near their export markets, and by taking advantage of lower labor costs and other favorable conditions, should be carefully studied. Such studies might well reveal that past volume can be regained or even exceeded, through such an operation.

It is believed that it is highly advisable for any progressive American manufacturer seeking expansion to consider establishing a base of operations in Europe, especially if opportunity to expand in the United States has become limited.

Strong American Influence

The West European market is already expanding and this expansion, for reasons already mentioned, will be further accelerated. Another important factor is that although the Common Market countries are speeding to remove the artificial barriers between them, they are maintaining a common high tariff against other nations; therefore, a large homogeneous and somewhat protected market is being created.

The noteworthy feature is that we are witnessing a decided trend towards the Americanization of tastes. In the past, European consumers prided themselves in having individualistic preferences. However, in recent years American influence in consumer goods has penetrated deep into Western Europe, as witnessed by the success of many well advertised and properly distributed American products. The American manufacturer in these fields coming to Europe now, can very well capture a share of this fast expanding market.

Another advantage of operating in Western Europe is that European Governments have always been very

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Cigarette making machines are among the major products of this plant, a subsidiary of American Machine & Foundry in Bologna, Italy. An excellent example of producing at or near market.

much export-minded. By special legislation and aids, such as low cost government credit, insurance of export accounts, refund of certain taxes, or even outright grants, they have encouraged exports. All these advantages will also be available to the American firms manufacturing in Western Europe. They will be particularly helpful in aiding their exports to the Middle East, and certain parts of Asia and Africa which have long shown a preference for European-made goods.

The high reputation enjoyed by European-made goods is due mainly to the existence of first-class engineering, designing and administrative talent used with a high degree of ingenuity. This fact is often overlooked by American managements which could very well benefit by combining European skill with American know-how. Western European industry has produced and will be in a better position to produce products certainly worth watching closely.

Time to Act Is Now

Hundreds of American firms have already started operating in Western Europe with marked success. A good many others are still hesitating, waiting perhaps for the right time. We cannot emphasize enough that, in our opinion, by waiting they will miss the best opportunities. If their products are found to be suitable and interesting for the West European customer after thorough investigation, they should start at once exploring the practical possibilities of entering this important market.

There are, naturally, several ways of entering a market, whether it be by direct manufacturing from raw materials, assembling from components, licensing of local manufacturers or other type of operation. As to facilities, there would be a choice of constructing or buying them. In most casts local capital is readily available for participation in investment. All these and other forms of operation can be successfully achieved. The choice of method should only be made after thorough investigation as to existing and future market potentials, buying habits and special features prevailing in each of the West European countries.

These special features are tremendously important, for during the next few years—when artificial barriers will still be in force although gradually relaxed—localities and types of operations should be chosen with the greatest of care in order to make European operations profitable from the start.

Tax Concessions Offered

Several West European communities or localities are offering substantial tax concessions, long-term low cost financing and even outright grants when a manufacturer agrees to be located in their particular area (where usually for one reason or another, economically depressed conditions prevail). The representatives of these communities in the U. S. do a good job of advertising these advantages, and many American firms are tempted by these attractive concessions. However, they should be well advised to check the particular disadvantages that such a location might have for their particular operation. Such disadvantages could very well wipe out all those said advantages.

Western Europe is no Shangri-La. It is as hard a market to break into as any market in the U. S., perhaps even more difficult because of special problems, such as those created by language, local customs and habits, long established traditions, difficult for a newcomer to understand, unless he exercises great care to study all angles in order to avoid costly mistakes. Yet, the potential is definitely there and a well-planned, well-organized operation should be more than rewarding.

We wholeheartedly subscribe to the general enthusiasm for extending manufacturing operations to Western Europe and feel sure that in the years to come these operations will be most important and profitable for those American firms which have started at the right time the right way and in the right place.

GROWTH

New Jersey's population of 6,066,782, according to the 1960 Census, shows a growth of 1,231,453 over the 4,835,329 counted in 1950, or an increase of 25.5%. Gainful employment increased from approximately 1,600,000 to 2,000,000 or about 25%.

Revenues of Public Service Electric and Gas Company, serving electricity or gas, or both, in communities with nearly 80% of the state's population, increased during that period from $186,000,000 to $395,000,000*, or 112%.

During the ten-year interval the Company has spent $1,042,000,000 for new facilities to keep ahead of the demand for those twin servants of Man — Electricity and Gas.

Those prognosticators of the future — such as the Regional Plan Association — tell us that the state can expect even greater growth. For instance, Regional Plan estimates the population increase for 8 northeastern counties of the state during the next 15 years to be 2,373,000, up from 4,041,000 in 1960 to 6,414,000 with 2,293,600 job opportunities in 1975.

We have reason to believe that large increases in population and job opportunities in other counties of the state will be substantial.

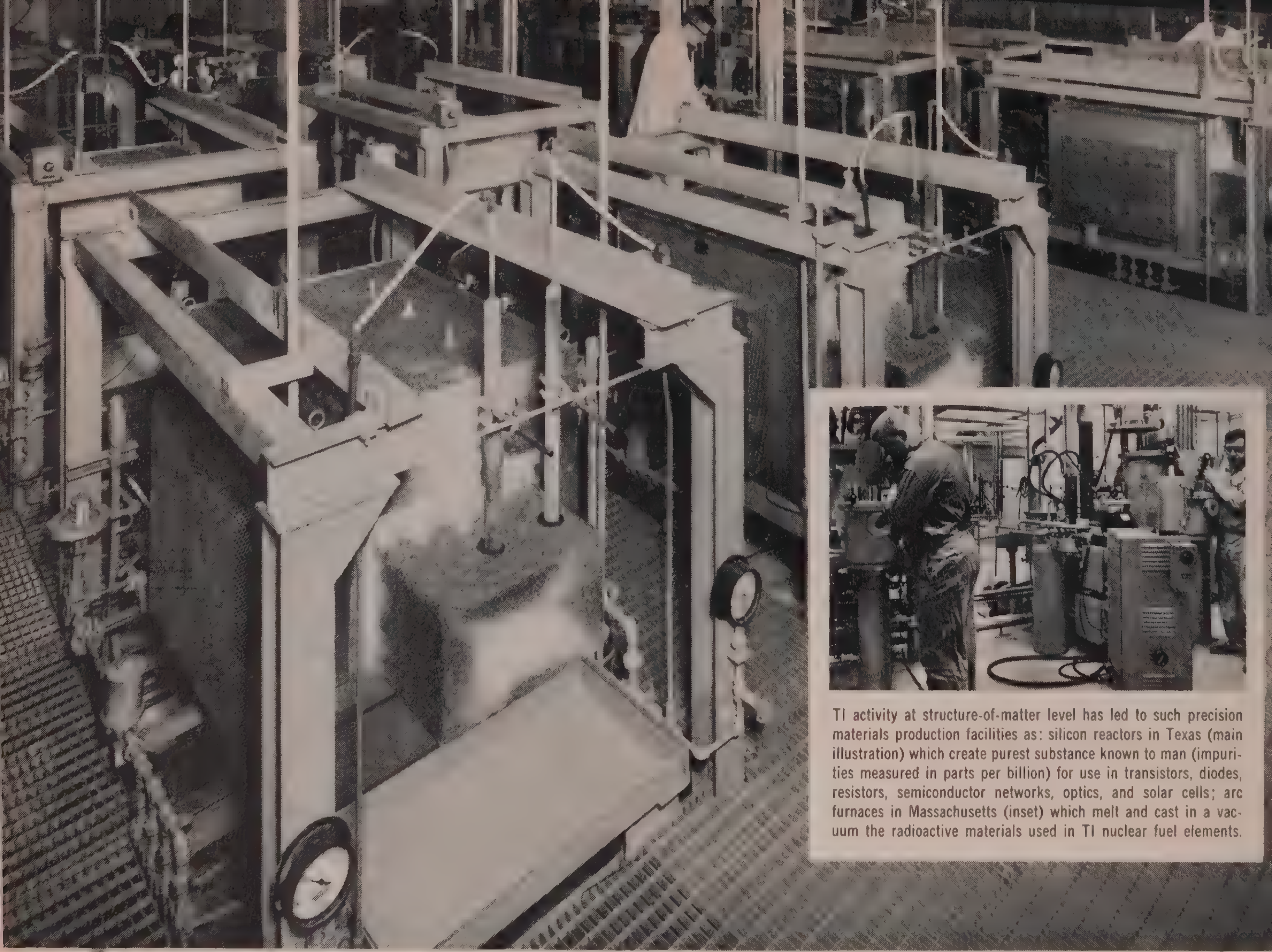
Public Service Electric and Gas Company is building for this growth and we intend to fulfill our responsibility by having adequate Electric and Gas service for the new industries that are bound to come, and for the employees they bring.

*(11 months actual — 1 month estimated)

PUBLIC SERVICE

Taxpaying Servant of a Great State

A7-61



TI activity at structure-of-matter level has led to such precision materials production facilities as: silicon reactors in Texas (main illustration) which create purest substance known to man (impurities measured in parts per billion) for use in transistors, diodes, resistors, semiconductor networks, optics, and solar cells; arc furnaces in Massachusetts (inset) which melt and cast in a vacuum the radioactive materials used in TI nuclear fuel elements.

NATURE'S PUREST IS RAW MATERIAL AT TI!

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The ability to control production from a basic state to an infinite number of finished forms has supplied materials so pure that contaminants are reduced to the billionths, straining the sensitivity of the most advanced measuring instruments. Controlled materials production is of such volume at TI that several special facilities (of which the operations above are small segments) are devoted to both batch and continuous processes.

Among the hundreds of materials being created, refined, purified, combined, manipulated, or supplied by TI are *silicon, germanium, tantalum,* and *gallium arsenide* for electronic components; *indium antimonide* for infrared detection cells; *bismuth telluride* for thermoelectric applications; *thermostatic metals* for aviation, automotive and home applications; rare and precious metals — such as *yttrium, hafnium, platinum,* and *gold* — for products in electronics, chemistry and medicine; *uranium, thorium* and *zirconium* for nuclear reactors.

This complete materials orientation already has benefited all TI customers. As the program further improves materials and reveals new characteristics and applications, it will benefit you as either manufacturer or consumer in an increasingly wide range of better products.

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End of the Post-War Bull Market?

... Author Sees 'A More Orderly and Steadily Rising Market'

by Jay Vawter

ON JANUARY 5, 1960 the Dow-Jones Industrial average hit an all-time high of 685.47. Two months later the same average rested at a level of 599.10, a drop of 12½% from the earlier high mark. Since that time the D-J average has twice rebounded only to return to the 600 level, and has finally blasted through this technical "resistance" point. With the initial market turn-down in the early months of the year came the question: "Has the post-war bull market finally come to an end?"

Such an issue must, of necessity, pose certain questions of semantics. First, what is a "bull market" and conversely what is a "bear market." It is not unreasonable, in referring to these terms, to accept the common definitions that have come about through usage. However, it is still desirable to recognize that even these everyday definitions are subject to a wide range of variation, especially when an effort is made to interpret the timing of bull and bear markets. What is to one Financial Analyst a bear market may be to another merely a temporary or technical reaction in a full-blown bull market. For this reason it is probably more important, in defining terms, to concentrate on the "Post-War" part of the central issue, the so-called "Post-War Bull Market."

The term "Post-War" could conceivably range from a period of a couple of years after the end of a war to the beginning of the next war. In this particular approach, attempting to delineate the Post-War period, the discussion will center around the "Post-War Economy" and then will tie in the stock market to the economy in reaching a conclusion. It is therefore assumed that there is a direct relationship between economic behavior and stock market behavior, a generally accepted, but not indisputable function.

To understand and evaluate the present economic and stock market position, it is of great value to review the events that led up to and influenced the current situation. This should serve to answer two main questions: What were the factors that created the post-war economic boom and coinciding bull market and, have these factors ceased to operate, thus marking the end of the post-war economic boom and coinciding bull market?

When the war finally ended in August of 1945, the transition that followed was to mark the end of a 15-year consumer goods famine. Personal consumption expenditures had plunged from $78.9 billion in 1929 to $46.4 billion in 1933. By 1945 this figure had reached $121.7 billion, but much of this increase was the result of wartime inflation. But of even greater interest during this 15-year period was a comparison of personal income and personal consumption. In the last boom year before the war, 1929, the nation's personal income totaled $85.8 billion, its consumption $78.9 billion (the disposable income in those days of low taxes was $83.1 billion).

A Contrast in Incomes

In 1933, the depth of the depression, personal income reached a low of $47.2 billion, disposable income $45.7 billion, and consumption $46.4 billion. This was the second consecutive year of negative saving (that is, consumption exceeded disposable income). The war years bring a striking contrast. In the first year of the hot war for the United States, 1942, personal income hit $123.5 billion, disposable income $117.5 billion (taxes still were relatively low), but consumption was only $89.7 billion! This meant that American consumers were saving 23.7% of their disposable incomes! By 1944, the last full year of the war, personal income had risen to $165.7 billion, disposable income to $146.8 billion, and consumption to $109.8 billion. Saving now represented 25.1% of disposable income. Had it not been for the high tax level needed to finance the war, saving would have been 40%.

The significance of these voluminous statistics is readily apparent. During the depression, the American consumer was unable to buy goods (especially durables) because his income was so low that only a meager standard of living was possible. During the war, even though his income was high, he couldn't buy goods because there were no goods to buy.

Thus, as the war ended in August of 1945, the average American family found itself in the peculiar position of having been deprived of the goods and services it desired through 15 long years of depression and war, having in its possession this huge fund of savings that it hadn't been able to use.

REACTION OF THE STOCK MARKET

What of the stock market at the war's end? After an initial dive upon our entrance into World War II late in 1941, the Dow-Jones Industrials (this average is used purely as a matter of convenience, without comment as

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to its accuracy) had risen steadily during the conflict from a level of about 95-100 in May, 1942, to the 200-210 range in April, 1946, where it stayed until September of that year, when it began a drop that was to carry down to about 155 by November.

The immediate post-war market still remains something of a mystery. After this plunge in the fall of 1946, the Dow-Jones Industrial Average recovered slightly, but then lolled around in a narrow range around 175 for three full years, and not breaking the 200 level until early 1950. In the early days after the war, this inactivity and market apathy could, perhaps, be understood. Typically, after a war there is a sharp recession, and it was not unreasonable to expect the same after World War II. The recession after World War I had been severe and lasted nearly two years. However, the post-war economy of 1945-46 completely fooled the "experts." To be sure, the conversion from war to peace caused industrial production to drop sharply (by about 35%), but this was short-lived and during the same period employment and consumption failed to drop drastically (consumption actually rose). By 1947 the boom was on and only the capacity to produce limited the expansion. Yet the market failed to respond.

At this point it is appropriate to bring into the discussion another major factor that will eventually provide a basis for drawing conclusions. It has just been stated that the only limiting factor on the expansion that started in 1946 was the productive capacity. Once again it is helpful to review the historical background to understand the dynamics of the early stages of the post-war boom. In 1929 the production of producer's durables and non-residential construction was $23.3 billion. By 1933 this had dropped to $6.7 billion, and even by 1945 it had returned only to $17.5 billion. For 15 years the production of capital goods had been below a normal replacement level. Thus, at the war's end the economy was faced with a huge pent-up demand for goods, but its capacity to produce these goods was inadequate, run-down, and primarily geared for the production of tanks instead of cars, and guns instead of refrigerators. A rapid expansion in the production of capital goods was inevitable and was to provide the economy with an unprecedented stimulus.

In 1945, the last year of the war, the output of producer's durables was a meager $7.7 billion. By 1948, the end of what might be called the first stage of the post-war boom, this figure was $18.9 billion annually. In the same period new construction rose from a level of $3.8 billion to $19.5 billion. This rise in private investment represented a phenomenal growth, but still fell far short of what was needed and what was yet to be attained. But it was indeed helping to fill the 15-year gap in personal consumption. Even though Gross National Product only rose from $213.6 billion in 1945 to $259.4 in 1948 (a respectable increase in itself), personal consumption soared from $121.7 billion to $178.3 billion in the same period. True enough, much of the rise was inflationary, but the gains in real terms were substantial.

Recession of '49 Mild

The recession of 1949 marked the end of the first stage of the recovery. By almost any standards it was a mild recession, characterized primarily by inventory adjustments. From a net accumulation of $4.7 billion in 1948 the inventory picture was reversed to a net run-off of $3.1 billion in 1949. This represented a total decrease in output for inventory purposes from 1948 to 1949 of $7.8 billion.

Unemployment rose from 2.1 million in 1948 to 3.4 million in the recession the next year. However, it could hardly be said that the steam was out of the boom. New construction and producer's durables production dropped only slightly and personal consumption actually increased. At the very worst the economy was merely pausing, just long enough to allow its inventories to return to more normal levels. With 1950 came the second stage of the post-war boom and, at last, the first stage of the post-war bull market.

The so-called second stage of the boom must be regarded as abnormal because once again the influence of hot war appeared in the form of the Korean conflict. Fortunately the differences between the onset of this war and World War II were considerable. The Korean war was on a much smaller scale and used far less human and material resources than World War II. In addition, rather than operating at a low level with a much reduced productive capacity as in 1941, the economy was at a high level of production and had a much expanded capacity to produce. It was not surprising, then, to see the 1950-53 stage of the boom as a period of relative prosperity in spite of the economic waste that accompanies a hot war.

New construction jumped sharply in 1950 to $24.2 billion from $18.8 billion the year before, and by 1953 it had hit an annual rate of $27.6 billion. Output of producer's durables rose from $17.2 billion in 1949 to $22.3 billion in 1953. Productive capacity, in other words, continued to expand rapidly, and although much of the expansion was used for the war effort, the private sector also shared in the gains. Personal consumption increased steadily from $178.3 billion in 1949 to $232.6 billion in 1953. As in stage one much of the increase was inflationary, but even in real terms the consumer was continuing to fill the consumer goods gap of the depression of the 30's and the World War.

What of the stock market during this period? In January of 1950 the D-J Industrial average finally went through 200 and rose steadily until the outbreak of the Korean war, when it broke sharply back to just below 200. It recovered immediately and by the end of 1950 was nearing the 250 range. At last it seemed that the market was recognizing that the economy was sound and booming. Certainly all the signs of prosperity were there, as the figures in the accompanying table illustrate. The first stage of the bull market continued until early in 1953 when the DJI nearly reached 300, and then turned down in anticipation of the 1953-54 recession.

The causes of the 1953-54 recession were not unlike those of the 1948-49 recession, except perhaps amplified somewhat by the Korean War. As in the period after World War II, there was a rapid build-up of inventories, hitting an annual rate as high as $10.2 billion in 1951 (the highest rate in the first stage had been $6.4 billion in 1946). Not only was there the need to build inventories for the peacetime recovery, but also for the war needs in the Far East. Annual accumulations from 1950 to 1953 totaled nearly $25 billion, so when the Korean war ended in 1953 an inventory adjustment was almost inevitable. Such proved to be the case and an inventory run-off at an annual rate as high as $5 billion in the fourth quarter of 1953 occurred. Although production dropped and unemployment doubled, the post-war boom was far from over. Again, in spite of a recession personal consumption increased by nearly $6 billion in 1954.

New construction also increased right on through the recession, and output of producer's durables, although decreasing slightly did not show signs of drastic reduction. Once again the economy had shown that it was only resting, that it still had a long way to go and much expansion of productive capacity lay ahead. This is of great significance because it was the second time since the end of World War II that a recession had been characterized primarily as an inventory adjustment with few overtones of a capital goods recession. This meant that the economy was still strong and growing, continuing to fulfill the needs of a clamoring consumer bloc whose thirst for goods and services developed during the long drought had still not been satisfied. It was to presage the second and most dynamic stage of the post-war bull market.

The third stage of the post-war economy would seem to have represented the last stage in the transition from a booming post-war economy of excesses to a less frantic but, nonetheless, prosperous and more stable peacetime era (the cold war notwithstanding). For the first time in 25 years neither depression, war, or the immediate after-effects of war were a great influence on economic activity. Although we had just ended a shooting conflict of no minor proportions, a conversion from war to peace was hardly necessary since our peacetime production during the Korean War had continued to expand rapidly, resulting in very little dislocation of resources at the final cease-fire. Continued high outlays for national defense also helped to avoid any severe economic disorders at the conflict's end. Peace and Prosperity were, in fact, a realized goal in stage three of the post-war period.

GNP Reflected the Growth

The Gross National Product reflected this dynamic growth, rising from $363.1 billion in 1954 to $440.0 billion in the third quarter of 1957, just prior to the

NATIONAL INCOME FIGURES — 1945-1960

(In Millions)

		Personal Consumption Expenditures				Gross Private Domestic Investment			
	GNP	Durables	Non-Durables	Services	Total	New Construction	Producer's Durables	Inventory Change	Total
1945	$213,558	$ 8,105	$ 73,222	$ 40,372	$121,699	$ 3,833	$ 7,654	—$ 1,057	$10,430
1946	210,663	15,892	84,802	46,415	147,109	11,028	10,733	6,379	28,140
1947	234,289	20,593	93,382	51,434	165,409	15,254	16,667	—462	31,459
1948	259,426	22,723	98,739	56,853	178,313	19,454	18,925	4,708	43,087
1949	258,054	24,584	96,607	59,967	181,158	18,813	17,236	—3,072	32,977
1950	284,599	30,351	99,801	64,861	195,013	24,215	18,940	6,812	49,970
1951	328,975	29,471	110,135	70,199	209,805	24,811	21,290	10,233	56,334
1952	346,999	29,099	115,100	75,575	219,774	25,532	21,264	3,067	49,863
1953	365,385	32,875	117,961	81,813	232,649	27,588	22,305	447	50,340
1954	363,112	32,398	119,328	86,299	238,025	29,722	20,789	—1,639	48,872
1955	397,469	39,632	124,762	92,546	256,940	34,941	23,119	5,783	63,843
1956	419,214	38,369	131,382	99,649	269,400	35,732	27,002	5,446	68,180
1957 (Qtr.)									
1	429,900	35,900	137,300	103,400	276,000	32,800	30,700	....	63,600
2	435,500	35,000	139,100	104,900	278,900	32,700	30,500	2,900	66,200
3	440,000	35,000	142,500	106,100	283,600	33,000	30,500	3,000	66,500
4	432,600	34,400	140,800	107,200	282,400	34,000	30,000	—2,700	61,300
1958 (Qtr.)									
1	427,100	36,300	139,800	110,100	286,200	36,300	22,900	—8,200	50,900
2	430,400	35,600	141,400	111,300	288,300	34,900	22,300	—6,500	50,700
3	439,800	36,100	142,900	112,500	291,500	36,300	22,300	—4,200	54,500
4	453,000	38,900	143,300	113,600	295,900	38,600	23,000	....	61,600
1959 (Qtr.)									
1	470,400	41,300	145,300	117,400	303,900	39,700	23,900	6,300	70,000
2	487,900	44,400	147,700	121,400	313,600	41,300	26,100	11,500	78,900
3	481,400	44,000	148,000	124,100	316,000	41,100	26,500	—100	67,500
4	486,400	43,500	149,600	126,600	319,600	39,400	26,800	4,700	70,800
1960 (Qtr.)									
1	501,300	44,200	150,500	128,600	323,300	40,800	27,100	11,400	79,300
2	505,000	44,500	153,500	130,900	329,000	40,700	29,500	5,300	75,500

1957-58 recession. Personal consumption, showing its usual tenacity, increased steadily right through the 1953-54 recession to a level of $283.6 billion in the fall of 1957 (from $238.0 billion in 1954), and with only a brief set-back in the fourth quarter of 1957, to $288.3 billion in the second quarter of 1958, the bottom of the third post-war recession. The Federal Reserve Index of Industrial Production (1947-49 = 100) increased steadily from a recession low of 125 in 1954 to an all-time high of 148 in February and March of 1957.

The bull market was moving in full force. After falling back to the 250-60 range in September, 1953, the DJI began one of its most spectacular upward thrusts since the inception of the formal stock market as we know it. By March, 1956, it had gone through the 500 level, nearly doubling in only 2½ years. After reacting to around 450 early in 1957 it returned to 520 in July of that year prior to turning down sharply in the fall. This great bull market introduced the glamor stocks on a wide scale—the electronics office equipment, etc.

Even the blue-chips could hardly fail to make their owners rich "overnight." The small investor became an important customer to investment brokers as, lured by early successes, he joined the ever-growing list of corporate stockholders. This was the period in which the market letter writers seldom had to *overuse* the word "selective" to avoid making a forecast of things to come, as they often do today (as though the present market requires attention to specific issues, whereas before all one needed to do was buy "stock"). But, like almost everything else that goes up the stock market had to come down, and did so ingloriously in the fall of 1957, dropping nearly 20% in four months.

It can generally be accepted that the buoyancy of the market prior to 1957-58 was due to the tremendous growth of the post-war economy and the expected continuation of that growth. It is proper, therefore, to conclude that the severe weakness in the market in the fall of 1957 was a direct result of expected weakness in the economic structure (the market generally anticipates the economy by a few months, about three or four in 1957). However, going one long stride further, it is suggested here that this recession and attendant stock market collapse, marking the end of the third stage of the post-war economy and the second stage of the post-war bull market, certainly signified the end of the post-war boom, and very possibly portended the end of the Great Post-War Bull Market. This is not to imply that there was no strength left in either the economy or the market, but merely that such strength as remained could no longer be attributed to the shortages of the depression-war period, the shortages that had provided the initial stimuli to the huge expansion we call the Post-War Boom.

Economy Stages a Comeback

In one respect the 1957-58 recession was very much like the two post-war recessions that preceded it. That is, an accumulation of inventories had resulted in excesses that had to be trimmed. As the figures in the accompanying table show, the annual rate inventory decline was as high as $8.2 billion in the first quarter of 1958, a higher rate than in either of the two earlier economic declines. Thus, it would be easy to regard this recession as another, although more severe, inventory recession. But the true picture is not quite so easily drawn.

Producer's durables, even as late as the fourth quarter of 1957 were at a very high level of $30.0 billion annually and new construction hit $36.3 billion in the first quarter of 1958. This meant that our production of capital goods—productive capacity—was still booming even though inventories had already begun to decline. By the first quarter of 1958, just three months later, output of producer's durables had been cut back by almost 25% to $22.9 billion annually. Thus, we had superimposed on a normal inventory recession the first full-blown capital goods recession since the Great Depression of the 30's. Unemployment rose rapidly from 2.5 million in 1956 to a high of 5.4 million in June of 1958.

One of the few factors that remained relatively strong was new construction, which dropped slightly in the second quarter of 1958, then resumed its upward climb. There were the usual pleas for governmental action and the pressures on Washington were great. Luckily even before such proposals for public works, tax reductions and other government programs, as were being espoused in the nation's capital, could come off the drawing boards (let alone be implemented), the recession proved again to be V-shaped rather than U-shaped and recovery came about through natural means. The economy was basically sound but its complexion had changed from post-war boom to peacetime stable-growth. The post-war recovery was over and was being replaced by a sounder, more stable, although not so dynamic, economic growth.

That the "post-war" period was over can be demonstrated in two primary ways. First, the recovery boom was the result of two factors working in combination. One was the 15-year period of depression and war that deprived the American consumer of the goods he desired. The other was the huge fund of buying power he had built up during the war, but had been unable to use. As this fund was used to buy goods and services in the early stages of the recovery it not only helped satisfy the heavy demands of the consuming public directly, but also generated greater incomes to further aid in filling this consumer goods gap. By the time of the 1957-58 recession, while it could not be said that the consumer had satisfied all of his wants, it seemed clear that he had acquired or replaced all of the goods that he had done without or worn out between 1930 and 1945. A good case could be made to show that he reached this level even before 1957, but by that time there could be little doubt about it. Although personal consumption continued to increase during this period of recession, the rate of increase declined considerably.

Post-War Recovery Ends

The second indication that the post-war boom had ended lay in the capital goods sector. For 12 years the production of plant, equipment and machinery had grown at a rapid rate, hardly slowing down even in recession periods. The great need for productive capacity to meet the huge demand for goods after the war could not be met all at once. Such a gigantic investment of resources had to be made over a long period of time, so it is not surprising that it took nearly 12 years to acquire a productive capacity that could meet current and future demands for consumer goods.

Actually, when compared with similar projects around the world, it is amazing that we could do it in so *short* a time. Such a feat is certainly a glowing testimonial to the free enterprise system. By 1957, however, our productive capacity had finally caught up to current demands for goods, and in fact had reached an excessive level capable of meeting future needs for several years. Since this capital goods expansion had been a vital stimulus to the post-war boom, its demise can be accepted as a sign-post marking the end of the post-war segment of the boom. It is concluded here, then, that the post-war recovery boom ended in 1957. The causes of its end were forming even before that year, but the boom itself carried on a little longer on sheer momentum.

Had the post-war bull market ended when the post-war boom ended? Once again it is necessary to rely on semantics for the answer. It is well known that the DJI rebounded sharply from the 420 level in the fall of 1957 to an all-time high of 685.41 on Jan. 5, 1960. It is also no secret that the market, upon finding itself at such an Alpine level, wasted no time in diving back toward firmer ground. Not a few Financial Analysts feel that it still has more settling ahead of it. When the market began its last long climb in mid-1958, optimism prevailed. Economic recovery was under way and investors refused to believe that the economy had actually changed its complexion. As a result, the market soared, leaving many Analysts (this writer among them) wondering what was going on and when it would stop. It wasn't that the economy was weak or that the outlook was foreboding, but that there simply were not the same forces acting to provide the surge of the prior 12-year period.

Consumers continued to increase their demands, but at a slower rate. Output of capital goods began to increase, but slowly. Profits in many industries recovered well, but constantly increasing wages and other costs combined with stiffer competition (practically all you had to do to sell a product earlier was to produce it and put it on a shelf where everyone could see it) to squeeze profits in many areas of the economy. In spite of this it took the market a year-and-a-half to "see" that the boom was over and that a reappraisal was in order (such reappraisal is still going on).

For practical purposes this bull market ended in 1957. A market recovery from the 1957 low was to be expected, and a gradual improvement from that low to about the present level (or perhaps a little lower) would also have been realistic. The period since the 1957-58 recession has been one of relative prosperity and should have stimulated some rise in the market. It has been, and is, a period of transition from the old post-war boom to the new stable-growth period that should lie ahead. The natural growth in population and the desire of the American consumer to improve his already high standard of living should provide for a sound and stable growth over the next decade and beyond. The stock market should certainly share in this economic growth and wise investment should be quite profitable.

Whether a bear market will come before a new bull market begins is quite uncertain. The present market could be called a bear market, but seems to be more on the order of a return to values that should never have been exceeded in the first place. Perhaps the market will return to the lower levels of the last recession, thus becoming a genuine bear market. If so, in view of the great potential in our economy, such a market would present most unusual opportunities to buy stocks at bargain prices. There are strong opinions that many such bargains are already appearing.

A MORE ORDERLY BULL MARKET

It is concluded here that the strong market, following the market collapse in 1957, was a new bull market based on a new set of market factors. Disputants could claim that the drop preceding this rise was not deep enough or of long enough duration to qualify as a bear market and therefore the succeeding upturn could not be called a "new" bull market, but merely a continuation of the old. This could be faulty reasoning.

How far must a market drop and for how long must it stay down to be a legitimate "bear" market? The market of 1957-58 dropped 20% and took nearly a year to recover. Even though not a prolonged bear market, that would seem to have been more than a mere "technical adjustment." Even if we decide that there wasn't a bona fide bear market, do we necessarily have to assume that a new bull market could not be started until after a prolonged bear market has run its course? Whether there was a real bear market in 1957-58 or not, the bull market since that time has been based on a new economic personality and can be called a new and different market than what preceded it.

This "new" bull market has expanded too rapidly and is now seeking a proper level. It is possible that this "transitional" bull market will end and be followed by a bear market before another bull market begins. However, the present weakness is very likely a temporary lag in a longer term bull market which originated in mid-1958 and which could take quite sometime to develop full force again, but which should be of great consequence once it resumes. It may not be a charging, snorting bull, as before, but will probably be, not without exceptions, a more orderly and steadily rising market, based more on present sound values rather than wild hopes of future values, such as characterized the Great Post-War Bull Market.

Memo to Shareholders of United Gas Corp. from C. C. Barnett, Vice President, Gas Supply

"THE MERCHANDISE ON OUR SHELVES"

Natural gas reserves owned by our company are at an all-time high. Last year . . as the world's largest handler of natural gas . . we sold more than 1.3 trillion cubic feet. Today, our company owns or has under gas purchase contracts with other producers over 11½% of the known natural gas reserves in the United States. These reserves are located in some 475 fields. Our job is to keep ahead of the growing gas requirements of present customers . . and meet the demands of future customers in the expanding Gulf South. We are doing just that . . and will continue to do so in the years ahead.

UNITED GAS CORPORATION
SERVING THE GULF SOUTH
Headquarters, Shreveport, La.

WORLD'S LARGEST HANDLER OF NATURAL GAS

WHY BUY BONDS?

'a place in almost every Investor's Portfolio'

- by Stephen B. Packer

BOND YIELDS have been trending upward, both absolutely and relative to common stock yields, through the post-war period. Persistent price inflation—against which stocks are considered to provide some hedge and bonds none—is a common explanation of this performance. Actually, the raw material stocks, which theoretically provide best protection against inflation, have not outperformed the market, and inflation is not the whole answer.

Steady economic growth and continued prosperity have led investors to place increasingly liberal valuations on common stock earnings and accept lower dividend yields. This same prosperity has brought on steadily increasing demands for long-term funds, and led the monetary authorities to restrict money supply growth and push up interest rates with the aim of levelling business cycles and halting price advances.

Tax considerations have led corporations to issue more bonds, and less stock, than might otherwise have been the case. Bond interest is deducted from taxable net while dividends on stock, of course, are not. The limited volume of new stock issues, in the face of rising demand from such major factors as investment companies and corporate pension funds, has caused prices of outstanding issues (particularly those of top quality) to be bid up sharply.

Despite increasingly generous yields, the bond market has remained largely an institutional affair. The exception is the municipal sector, where tax exemption has given individuals an incentive to invest. Considerations of law and prudence require that most savings institutions place the bulk of their funds in bond and mortgage investments, although the common stock holdings of some have been growing in recent years. Also, most institutions deal in fixed-dollar claims, and need not be as sensitive as individuals to purchasing power considerations.

The Securities and Exchange Commission and Treasury figures show that individuals' holdings of Government (other than Savings) and corporate bonds have tended to fluctuate over interest rate and business cycles, and that secular growth through the post-war period has been limited. The liberal interest rates available in 1959 did stimulate individual interest in Government issues, and individuals added over $9 billion to their holdings of marketable Treasury and federal agency issues during the year. The 5% notes maturing August 15, 1964, issued in October, 1959, may have cost the mutual savings banks alone close to $200 million in deposits.[1]

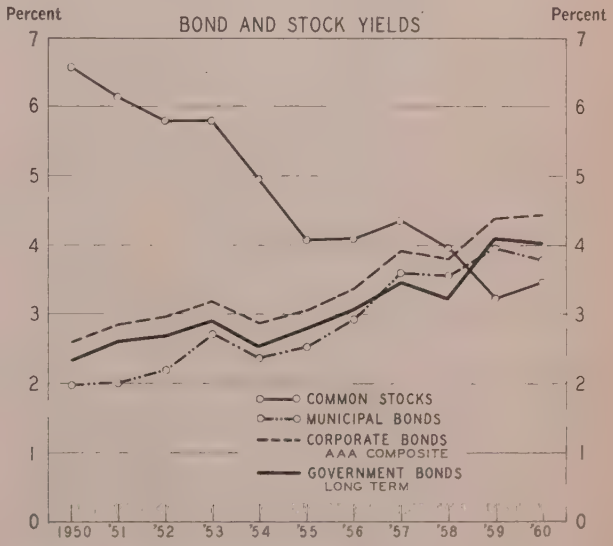
By contrast, the S.E.C. figures show that individuals' holdings of municipal bonds have grown steadily in the past decade, at an average rate of over $1 billion per year.

The market for fixed-income securities covers a wide area of maturities, from two or three months to 30 or more years. Although yields in the various maturity sectors tend to move in the same direction (particularly over the longer term) the sectors are governed by somewhat different sets of forces. The market for issues maturing in five years or less is dominated by business corporations and commercial banks.

While the commercial banks also invest in longer-term issues, savings institutions and individuals are more important in this market. The comments below are intended to apply primarily to long-term bonds—those maturing in 10 years or more.

Factors Determining Bond Prices

The seller of a bond, whether a business corporation or a government unit, attempts to raise capital at minimum cost. In the case of the federal treasury particu-



Source: Standard & Poor's Corp.

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[1] Footnotes appear at end of article.

Stephen Packer, a money market and government bond analyst, has been with Standard and Poor's Corporation since 1958. He has also served as an economic consultant, Financial Analyst and lecturer in economics. Mr. Packer holds degrees from Columbia University and the University of Chicago.

Table I

Changes in Individuals' Security Holdings

(Billions of Dollars)

Year	U. S. Treasury Bonds*	Municipal Bonds	Corporate Bonds	Corporate Stocks**
1950	−0.6	0.7	1.4	
1951	−1.2	0.4	−0.1	1.8
1952	0.3	1.0	0.4	1.6
1953	0	1.8	0.4	0.9
1954	−1.6	0.7	−0.1	0.7
1955	1.6	1.7	1.6	1.2
1956	1.7	1.5	0.4	1.6
1957	1.6	2.2	1.4	1.4
1958	−2.4	1.3	1.1	1.4
1959	9.7	2.5	0.3	0.9
1960 ***	1.8	0.9	0.4	−0.2

*Excludes U. S. Savings Bonds. Includes federal agency issues.

**Includes investment company shares.

***Through June 30.

Source: Securities and Exchange Commission.

larly, other factors beside interest cost can influence the timing and maturity range of a financing, but issues are still priced as thinly as possible for sale in the current market.

The seller promises to pay 100 cents on the dollar when the bond matures or is called, but makes no guarantees about what the bond will be worth in the interim. Relative attractiveness of current offerings, the creditworthiness of the seller, and in recent years concern over being paid off in depreciated dollars have induced substantial price fluctuation in outstanding bonds. Because of the probability that the holder will be paid in full at maturity if not before, and because in corporate financial structures bonds are senior to stocks and do not fluctuate in book value, price fluctuations of bonds are narrow relative to those of stocks.

Interaction between supply and demand for long-term funds is probably the principal determinant of changes in bond prices and yields. Government spending trends and business conditions largely determine the magnitude of demand over the long run. In practice, financing alternatives and leeways (the choice between bank borrowing and funding, the timing of offerings, selection of maturities and terms) affect the flow of new bond issues considerably. Principal sources of demand are the U. S. Treasury and federal agencies, state and local governments, business corporations, and real estate mortgages.

The supply of long-term funds comes largely from savings institutions of various kinds, and from individuals. The commercial banks, particularly those holding sizable time deposits, provide some long-term funds and are also an important sources of interim financing for long-term borrowers. Total assets holdings of all these institutions have grown through the post-war period, but rates and patterns of growth have varied. Fund inflows of corporate pension funds have been rising pretty steadily, while those of life insurance companies have been relatively stable. Successful competition with other institutions has brought increasingly rapid growth for savings and loan associations. Mutual savings bank growth has reflected a cyclical influence, related to changes in consumer spending-saving behavior and consumer confidence.

Federal Reserve operations have an important influence on bond yields, although their direct effect is limited to the commercial banking system and weighs most heavily on the short-term market. Countervailing supply-demand trends can prevent the effects of Federal Reserve policy from filtering through to the longer maturities for a time. The flexibility enjoyed by key borrowers and lenders (particularly the Treasury, business corporations, and commercial banks) in timing operations and selecting maturities provides the means through which money policy can affect the long-term market. In practice, movements in long and short-term yields are generally in the same direction. Yield fluctuations in short-terms are far more volatile.

In addition to its actual effect on the money supply and on commercial bank reserve positions, Federal Reserve policy moves strongly influence market psychology, a potent determinant of short-run bond price movements. Market psychology, or expectations of future price movements, operates with special force in the new issues market, and can produce interim market fluctuations of substantial proportions during a cycle in bond yields.

'A War of Nerves'

In Treasury offerings, psychology has a strong effect on subscriptions and refunding attrition. The corporate and municipal new issues markets frequently witness a war of nerves. Sellers need funds, want the best possible price, and have the alternative of postponing offerings. Buyers receive fairly regular fund inflows on which income must be earned, and can either buy current offerings or build liquid reserves in expectation of lower prices later. Near-term price expectations have strong influence on the behavior of these groups.

Optimistic psychology was largely responsible for the speculative runaway in bond prices during the relatively brief period of Federal Reserve ease in 1957-58. Market concern over implications of the U. S. gold outflow was partly responsible for the failure of bond prices to respond to favorable market fundamentals during the late months of 1960.

U. S. Treasury finances have a powerful impact on the market. Existence of a cash budget surplus or deficit for the fiscal year—along with such factors as refunding attrition, Savings Bond sales and redemptions, and cash balance fluctuations—influence money supply changes and Federal Reserve policy. Presence of a seasonal budget deficit during July-December, and a seasonal surplus in January-June, helps produce seasonal changes in money market pressures and interest rates.[2] Choice of maturities in financing operations influences relative interest rate movements in the short and long-term markets. In view of the great magnitude of the federal

Table II

Supply and Demand for Capital*
(Billions of Dollars)

	SUPPLY — ASSETS OF				DEMAND — BOND SALES OF			
End of Year	Life Insurance Companies	Corporate Pension Funds	Mutual Savings Banks	Savings and Loan Associations	U. S. Government**	Corporations	State & Local Governments	Increase in Real Estate Mortgages
1950	64.0	5.7	22.4	16.9	9.7	4.9	3.5	10.1
1951	68.3	6.9	23.4	19.2	9.9	5.7	3.2	9.5
1952	73.4	8.4	25.3	22.7	13.0	7.6	4.1	9.1
1953	78.5	10.2	27.2	26.7	14.1	7.1	5.6	9.9
1954	84.5	12.2	29.4	31.6	13.0	7.5	7.0	12.4
1955	90.4	14.2	31.3	37.7	10.4	7.4	6.0	16.2
1956	96.0	16.6	33.4	42.9	5.7	8.0	5.4	14.6
1957	101.3	19.3	35.2	48.1	10.2	10.0	7.0	12.1
1958	107.6	22.1	37.8	55.1	14.4	9.7	7.4	15.3
1959	113.7	25.3	38.9	63.5	13.0	7.2	7.7	19.2
1960***	116.4	Unavailable	39.6	67.2	5.8	3.6	4.1	7.5

*Bond sales are on a gross basis.
**Includes federal agency issues, and issues maturing in one year or more.
***Through June 30.

debt, even a relatively small Treasury long-term bond offering (of, perhaps, $1 billion) has substantial effect on the bond market.

While yields in the various bond market sectors generally move together, there are differences among the various types of bonds sufficient to vary their relative attractiveness for different classes of investors.

Long-Term Governments

The federal debt is currently around $290 billion. Of this total, something over $185 billion is in the form of public marketable issues. About $145 billion of these mature in less than five years, and only a little over $20 billion in 10 years or more.

U. S. Government bonds are traditionally considered the safest form of bond investment, the standard against which all other issues are rated. Most of them are absolutely non-callable. They yield as a rule about ½ point less than top-quality corporates, and the current spread is greater. Their price fluctuations in recent years have been sufficient to reduce their attraction from the standpoint of capital safety. Most of the long-term Treasuries now outstanding have at times been priced below $90 (per $100 bond), and some have dropped below $80.

Their relatively unattractive yields and their vulnerability to price have narrowed the market for Government bonds in recent years. Despite efforts of the Eisenhower administration to lengthen the debt, the total of issues maturing in 10 years or more has declined over $10 billion since the end of 1956. The average maturity of the federal debt has shortened by close to one year.[8]

The savings institutions, traditionally the backbone of the market for Government bonds, have been reducing their holdings steadily through the post-war period. Insurance company holdings of U. S. Governments (all maturities) are less than half of what they were at the end of 1945. Mutual Savings bank holdings are down from $10.7 to around $6.5 billion. Savings and loan associations have built their relatively modest portfolios in recent years, but the principal purchasers of long Governments over the past decade have been those pension funds (largely state and local) limited by law from acquiring other issues. More and more of these funds are being granted greater flexibility in their investments, and state and local holdings of Government issues have shown less growth in the past three years than formerly.

The Treasury has been more successful in lengthening its debt through use of the advance refunding technique, which offers improved yields to holders of outstanding bonds who do not wish to take a book loss by selling their holdings in the market. Use of advance refunding was made possible by a recent law giving the Treasury power to "allow holders of the refunded securities to

Table III

Ownership of U. S. Government Securities
(Billions of Dollars)

End of Year	Mutual Savings Banks	Insurance Companies	State and Local Govts.	Individuals	Savings and Loan Assns.	Corporate Pension Funds
1950	10.9	18.7	8.8	16.7	1.5	†
1951	9.8	16.5	9.6	15.5	1.6	2.2
1952	9.5	16.0	11.1	16.0	1.8	2.2
1953	9.2	15.9	12.7	15.4	1.9	2.3
1954	8.8	15.3	14.4	13.5	2.0	2.3
1955	8.5	14.6	15.1	14.8	2.3	2.5
1956	8.0	13.2	16.1	15.6	2.8	2.3
1957	7.6	12.5	17.0	15.5	3.2	2.0
1958	7.3	12.7	16.7	14.4	3.8	2.0
1959	6.9	12.4	17.5	22.9	4.5	2.1
1960**	6.6	11.8	17.7	23.5	4.6	2.1

†Unavailable.
*Excludes holdings of U. S. Savings Bonds.
**As of June 30.

Sources: U. S. Treasury Dept., Securities and Exchange Commission, Home Loan Bank Board.

postpone for tax purposes any gain or loss on the operation."[4]

In view of the limited current demand, the market for long-term Governments has been a thin, largely professional affair since the speculative flurry of 1957-58 came to an end. Trading volume is persistently light, and quotes are often untested by actual market transactions. Government bond prices have fluctuated in response to developments in the money market or other bond sectors. They have rarely led the market, except during periods when a long-term Treasury offering or other specific event was being anticipated.

Federal agency issues yield about ¼ of a point more than comparable Treasuries. They are not guaranteed by the government, but are issues of organizations supervised and/or owned by the federal government. For this reason, they are considered virtually as safe as direct U. S. Government obligations. The total of federal agency issues outstanding has expanded from $1.2 to about $7 billion in the past seven years, but most of these are short-term instruments. The Federal Land Banks and the Federal National Mortgage Association together have outstanding perhaps $1.5 billion of issues maturing in five years or more. Not all issues are always available in the open market.

The Government bond market is a tightly organized operation, in which six dealers and perhaps five banks handle some 90% of the total business volume. Bid-asked spreads are narrow (generally ¼ point per $100 bond for long-terms), and the market is geared to handle round lot orders of $100,000 (face value) or more. Smaller amounts of these marketable issues can be bought from dealers, brokers, and banks, usually involving payment of a modest additional commission.

Corporates More Active

Corporate bond issues have shown a secular uptrend throughout the post-war period. The nation's capital plant has been increasing in both size and complexity, and construction costs have been rising.

Steady rise in depreciation charges has kept internal cash flow relatively stable, despite fluctuations in retained earnings. Cycles in corporate short and long-term spending have helped cause substantial fluctuations in corporate bond offerings. However, there is no really close correlation between corporate spending on the one hand and bond issues on the other. Corporations have leeway in choosing between bank borrowing and funding, and in timing their bond offerings. Some firms build up bank loans first, fund them later, so that "lagged response to cyclical conditions is apparent in long-term debt financing."[5] This lag relationship is not close, or predictable.

Table IV

Corporate Spending and External Financing

(Billions of Dollars)

	Spending		External Financing			
Year	Plant & Equipment	Inventories	Stock Issues (Net)	Bond Issues (Net)	Other Long-Term*	Short-Term Bank Loans
1950	16.9	9.8	1.7	2.0	0.5	2.1
1951	21.6	9.8	2.7	3.6	1.5	3.9
1952	22.4	1.3	3.0	4.9	1.5	1.6
1953	23.9	1.8	2.3	4.8	0.5	−0.1
1954	22.4	−1.6	2.1	3.8	0.5	−1.1
1955	24.2	6.7	2.7	4.2	1.7	3.7
1956	29.9	7.6	3.2	4.7	3.2	2.2
1957	32.7	2.1	3.5	7.1	1.4	0.3
1958	26.4	−3.3	3.6	5.9	1.4	−2.4
1959	27.7	5.3	3.7	4.3	1.7	2.1
1960**	14.9	0.6	1.6	2.4	1.1	1.0

*Includes term bank loans.
**First half of the year.
Source: U. S. Department of Commerce.

Principal buyers of corporate bonds include insurance companies and corporate pension funds. State and local holdings of these issues have been growing in recent years, as these funds achieve greater legal latitude in their operations. Home mortgages have been the principal competitor of corporate bonds for the investors' dollar, among taxable investments. The savings banks, in particular, have turned to mortgages and away from corporates in recent years. Mortgage yields are usually higher than those of corporates, and fluctuate less over interest rate cycles. They cost around ¼-½% a year to administer, depending on the institution and the type of mortgage.

Top-quality corporates "normally" yield about ½ point more than Governments, although the current spread is slightly greater. Many corporate bonds offer some protection against early call, a feature insisted on by a growing number of institutional buyers (particularly over the past 5-6 years). New issues will often yield more than seasoned bonds, particularly during periods when, the market is tight and retail distribution difficult. Some corporates are sold on the stock exchanges, but most are sold over the counter.

Ratings, as made by the three leading rating organizations, are a most important determinant of bond yields. Bond ratings are not scientific measurements of a bond's value, but are symbols "denoting relative ability to pay interest and principal promptly, and meet other indenture provisions."[6] At Standard & Poor's Corporation, these ratings are determined after an exhaustive study of the issue in question by a committee. They are based on earning power, property protection, and financial resources. Debt retirement policy is also important, particularly where junior debt exists.

A bond's rating does not determine exactly where or how it will sell. Apart from the important question of call protection, certain "names" are considered particularly easy, others particularly difficult, to market. Existence of a large number of outstanding issues can sometimes cause a particular company to pay more for new money than might otherwise be required. Investors are sometimes reluctant to concentrate too large a proportion of their holdings in issues of one company.

Prices of corporate bonds are influenced by long-term interest rate movements, and by the business outlook. Prices of the various ratings do not move in parallel fashion. Bonds rated “A” or higher move largely with long-term interest rates, as determined by bond and money market forces. Bonds rated “BB” or lower fluctuate largely in accordance with the business and earnings outlook. Bonds rated “BBB” are influenced by both forces, with the dominant factor depending on the particular issue. In general, utility bonds will follow long-term interest rates most closely, while railroad bonds will be most influenced by business conditions. Industrial bonds fall in between.

Convertibles More Speculative

Convertible corporate bonds are sold in two principal forms. Most are directly convertible into common stock at a pre-determined stock price. Some are sold with warrants that permit the holder to buy a given number of common shares per bond, at a pre-determined stock price.

Convertible bonds are more speculative than “straight’ bonds. Potential profits to be derived from conversion are often reflected in the bond price. These bonds are frequently sold by less substantial companies, which would have to pay a substantially higher interest rate without the conversion feature and might not be able to market a “straight” bond at all.

Like all other bonds, convertibles are sold by the issuing company at the best possible terms, referring to interest return and conversion privileges, that it can obtain in the market. Not infrequently the company’s fortunes fail to justify these terms, and the common stock price sinks to a level at which profits from conversion become remote. Under these circumstances, the bond may sell at a yield approximating its true investment value as a “straight” bond. Bonds which appear to offer better defined promise of profits through conversion frequently sell well above their true investment value.

Table V

Corporate Bond Yield Comparisons
(Per Cent)

	YIELDS				
Year & Month	Long-Term Government Bonds	AAA Utility Bonds	BBB Corporate Composite Bonds	BB Railroad Bonds	Industrial Common Stocks
1957					
Sept.	3.67	4.31	5.09	6.36	4.09
Oct.	3.75	4.29	5.09	6.57	4.35
Nov.	3.48	4.27	5.17	6.89	4.49
Dec.	3.07	3.89	4.96	6.88	4.50
1958					
Jan.	2.97	3.62	4.81	6.64	4.37
Feb.	2.98	3.60	4.77	6.63	4.38
March	2.94	3.68	4.85	6.78	4.27
April	2.79	3.64	4.82	6.79	4.24
May	2.84	3.62	4.79	6.71	4.10
June	2.92	3.62	4.74	6.50	3.99
July	3.11	3.75	4.81	6.56	3.88
Aug.	3.40	3.94	4.90	6.53	3.67
Sept.	3.60	4.19	5.08	6.52	3.57
Oct.	3.71	4.22	5.08	6.37	3.43
Nov.	3.68	4.19	5.00	6.19	3.31
Dec.	3.79	4.21	4.98	6.23	3.23

Source: Standard and Poor’s Corporation.

Relation between current and true investment value is one way to evaluate a convertible bond. Prospects of profits through advance in common stock price and conversion is another. For that reason, Standard & Poor’s recommends convertible bonds on two bases—for income, and for profit prospects.

Municipals’ Growth Rapid

The seemingly inexhaustible needs of a growing and mobile population have kept state and local spending, and financing needs, in a steady uptrend throughout the post-war period. No end is in sight. State and local bond issues set successive new records in 1958 and 1959. While it appears that they will fall short of the 1959 peak in 1960, due to financing delays occasioned by election uncertainties and anticipation of bond market improvement, another new record is anticipated in 1961.

Financing authorities have substantial leeway in scheduling offerings. They have the alternative of obtaining temporary short-term financing from the banks, and projects can frequently be postponed or stretched out. An Investment Bankers’ Association Study[7] indicates that municipal financing has some tendency to fluctuate inversely with interest rate cycles.

The unique advantage of tax exemption, of ever-increasing importance in a nation in which inflation and rising tax rates are producing mounting tax burdens, has kept the demand for municipals rising along with the ever-growing supply. Yields of tax-exempts have held their own, relative to taxable yields, over the past 10 years.

Most municipal issues are serial in form, containing maturities ranging from one to 20 or more years. Commercial banks dominate the shorter end of the market, while most of the longer-term issues are purchased by high-bracket individuals for the tax exemption advantage. Life insurance companies are also buyers of municipal bonds, and there is a large captive market.

The municipal market is the most diverse, and least organized, of the bond markets. The importance of individuals, as opposed to the more professionally-behaving institutions, in the market helps explain its looseness. There is a great multiplicity of bond issues, many of them small, and many commanding a local rather than a national market. There is also a great number of dealers. Bid and asked spreads in the municipal market are wider than in the other bond markets. Because of its diversity, its non-professional nature, and the importance of dealer inventories as a determinant of behavior, price fluctuations are sharper.

In as loosely-organized a market as this, ratings are of great importance in guiding buyers and determining relative yields. “A Standard & Poor’s municipal bond rating is our opinion, as expressed in symbol terms, of the odds against trouble arising from investment in any particular security."[8] The lower-rated bonds are usually more volatile, but otherwise prices of all ratings tend to move parallel, except as concern over the risk of default ebbs and flows. Sometimes the market will place a higher premium on a good credit than at others.

It has always been felt that a general obligation municipal bond sells at a lower yield than a similarly-rated revenue bond. While this may be true in a majority of cases, "this is a subject in which generalizations can be misleading and dangerous."[9] Much depends on the specific issue in question.

Speculation in Bonds Difficult

Fluctuations in bond prices are relatively smaller than in common stocks. Attractiveness of speculation in bonds (particularly "straight" bonds, without conversion or warrant privileges) lies in financing leverage. Treasury regulations permit Government bonds to be bought on as little as 5% margin. Up to 75-85% of its value can be borrowed on a good-quality corporate bond. With this much of the buyer's equity borrowed, carrying costs can become a significant burden if the bond is held for any long period of time.

More than the stock markets, the bond markets, and particularly the Government bond market, are dominated by professionals who are in effect speculating on their own account at all times. Determinants of bond prices are complex to begin with, and particularly over the short run professional behavior has a substantial impact on the course of prices.

All this does not make it impossible for the nonprofessional to speculate successfully in bonds, but does make it advisable that he be either extremely knowledgeable about the market *or* extremely lucky. It seems reasonable to state that the technical aspects of bond market speculation are beyond the ken of most investors, particularly most small investors. Speculation in tax-exempts is made particularly difficult by imperfections of this diverse market, and wide bid-asked spreads.

The one big flurry of bond market speculation in recent years came in 1957-58. It was based on expectations that the business recession, and Federal Reserve easy money policy, would continue for a long period. These expectations failed to materialize, and the crash in June, 1958, was sharp and sudden. Losses were heavy, particularly in Government bonds bought on 5% margin and in some cases less.

CONCLUSION

Institutions will, in the future, as in the past, continue to buy the bulk of corporate and marketable Treasury bonds. These securities, along with real estate mortgages, are the backbone of institutional investment holdings. Some institutions, notably pension funds, are increasing the proportion of common stocks in their portfolios. Considerations of law and prudence, and the relatively low yields available in good grade equities, are likely to limit the over-all importance of stocks in the institutional investment picture.

For individuals with small amounts of capital, U. S. Savings Bonds and the various types of savings deposits and insurance policies have much to recommend them, although they generally afford a lower interest return than bonds. They entail no risks of price fluctuation, can be withdrawn or liquidated on demand, and involve no dealer spreads or other commissions, which are relatively heaviest for the small investor.

There Are Times . . .

However, interesting buying opportunities periodically appear even in the prosaic Government and corporate sectors. There are periods, such as late 1959, in which market conditions push bond yields significantly above Savings Bond and time deposit rates. At such times, direct investment in bonds becomes more attractive than usual for individuals.

The Treasury issued five intermediate-term notes with coupons ranging from 4⅝ to 5% between July, 1959, and May, 1960. Potential profits ranging from four to over five points, in addition to very liberal yields, were available to investors who acted promptly when these issues appeared. During this same period, good quality corporate bonds (rated "A" or better) were available at yields of well over 5%. Although current bond yields are below the end-1959 peaks, good quality corporate new issues are still being marketed to return around 5%—compared with the 3 to 4% generally available in deposits, etc.

Investment in lower-grade corporate bonds (rated "BBB" or lower) can produce still higher yields. These issues, however, are subject to substantial price fluctuation, and to possible default. There is little to recommend lower-grade corporate bonds over good grade equities for the average investor. The equities generally are no riskier, and afford greater profit possibilities. Information about them is more readily available, and the investment decision less complex.

Speculation in convertible bonds offers interesting possibilities for the relatively sophisticated investor. These issues are safer than the company's common stock, frequently yield a greater return, and with the greater financing leverage available offer good profit possibilities.

Agility is frequently required in buying convertibles. Only a minority of companies have convertible bonds outstanding. Many of these issues are convertible at a stock price sharply above the current level, and are selling at or close to true investment value—an indication that their near-term profit potential is limited. Frequently a convertible issue is small, and hard to obtain in the market, especially when it is "hot."

Municipal bonds have been, and are likely to remain, the principal bond market attraction for individual investors. Many institutions have little interest in them, because of a lack of need for tax exemption. Yields of municipals are quite generous on a taxable equivalent basis, partly as a result of steady growth in the volume of new issues. Assuming a 50% tax rate, "A" rated municipals currently afford a taxable equivalent return of 7% or more. Their attraction for individuals in the higher tax brackets is obvious.

Assuming re-investment of the annual interest at a similar yield, $10,000 invested in a municipal bond today at a tax-free yield of 3⅝% would be worth about $14,280 at the end of 10 years. It has been predicted that common stock prices will advance 50% over the next 10 years. For an individual in the 50% tax bracket an investment of $10,000 in a common stock yielding 3½% in taxable dividends would, assuming (1) a 50% price advance, (2) re-investment of dividends, and (3) a 50% increase in dividends over the years, be worth about $16,120 at the end of 10 years. However, the assumptions about stock market trends (and performance of the equities actually held by the investor) are a good deal more risky. Inclusion of some municipals in the portfolio, as a means of diversifying risks, appears desirable.

The bond market today faces problems. Continued increase in living costs during a period of economic uncertainty indicates that the problem of price inflation still exists. The large outflow of gold continues. Economic measures to deal with these problems, and to maintain confidence in the dollar, must be expected. Interest rate cycles similar to those experienced over the past several years are likely, as the authorities aim at the frequently conflicting goals of full employment, stable prices, and balance of payments equilibrium.

Stock prices have in recent years advanced far more rapidly than corporate earnings and dividends. Bond prices, meanwhile, have been trending downward, and yields of high grade bonds have for some time exceeded those available on common stocks. Current bond yields, particularly of tax exempts, appear sufficiently generous to merit consideration even in the face of inflation and other uncertainties that may lie ahead. There is a place for bonds in almost every investor's portfolio.

FOOTNOTES

1. Statement appearing in the New York Times of November 27, 1959. The article cites the National Association of Mutual Savings Banks as its source.

2. Investment Bankers' Association of America, Seasonal Variations in Bond Yields. A study appearing in the association's Statistical Bulletin of September, 1960.

3. U. S. Treasury Department, Treasury Bulletin, various tables.

4. Statement appears in a speech on the Problems of Treasury Debt Management, delivered by Charles E. Walker, assistant to the Secretary of the Treasury, on November 11, 1959.

5. U. S. Department of Commerce, Survey of Current Business, October, 1960. "Sources and Uses of Corporate Funds," page 16.

6. Saul A. Smerling, Realism, Restraint, Careful Appraisal Govern Bond Quality Rating Decisions, in the American Banker, July 18, 1958.

7. Frank E. Morris, Monetary Policy's Impact on Local Governments, in the Commercial and Financial Chronicle of January 14, 1960.

8. Walter Tyler, Wide Variety of Factors Considered in Assigning Municipal Bond Ratings, reprint of an article originally appearing in the American Banker.

9. Statement appears in a speech on Revenue Bond Financing: Advantages and Disadvantages, delivered by Walter H. Tyler, editor, Standard & Poor's Bond Investments, on June 9, 1959.

Pacific Gas and Electric Company

DIVIDEND NOTICE
COMMON STOCK
DIVIDEND NO. 180

The Board of Directors on December 14, 1960, declared a cash dividend for the fourth quarter of the year of 65 cents per share upon the Company's common capital stock. This dividend will be paid by check on January 16, 1961, to common stockholders of record at the close of business on December 23, 1960.

K. C. CHRISTENSEN,
Vice President and Treasurer
San Francisco, Calif.

P·G·and E·

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—398th Dividend—
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A quarterly dividend of fifty cents (50¢) per share will be paid on December 14, 1960, to stockholders of record November 30, 1960.

CHAMP CARRY
President

Division and Subsidiaries:
Pullman-Standard division
The M. W. Kellogg Company
Trailmobile Inc.
Trailmobile Finance Company
Swindell-Dressler Corporation
Transport Leasing Company

GP
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GENERAL PORTLAND CEMENT COMPANY

Common Stock Dividend

The Board of Directors of General Portland Cement Company has this day declared a dividend upon its Common Stock of 30 cents per share with respect to the quarter ending December 31, 1960, and a further year-end dividend of 15 cents per share, both payable December 16, 1960 to stockholders of record at the close of business on December 1, 1960. The stock transfer books will remain open.

HOWARD MILLER,
Treasurer

November 10, 1960

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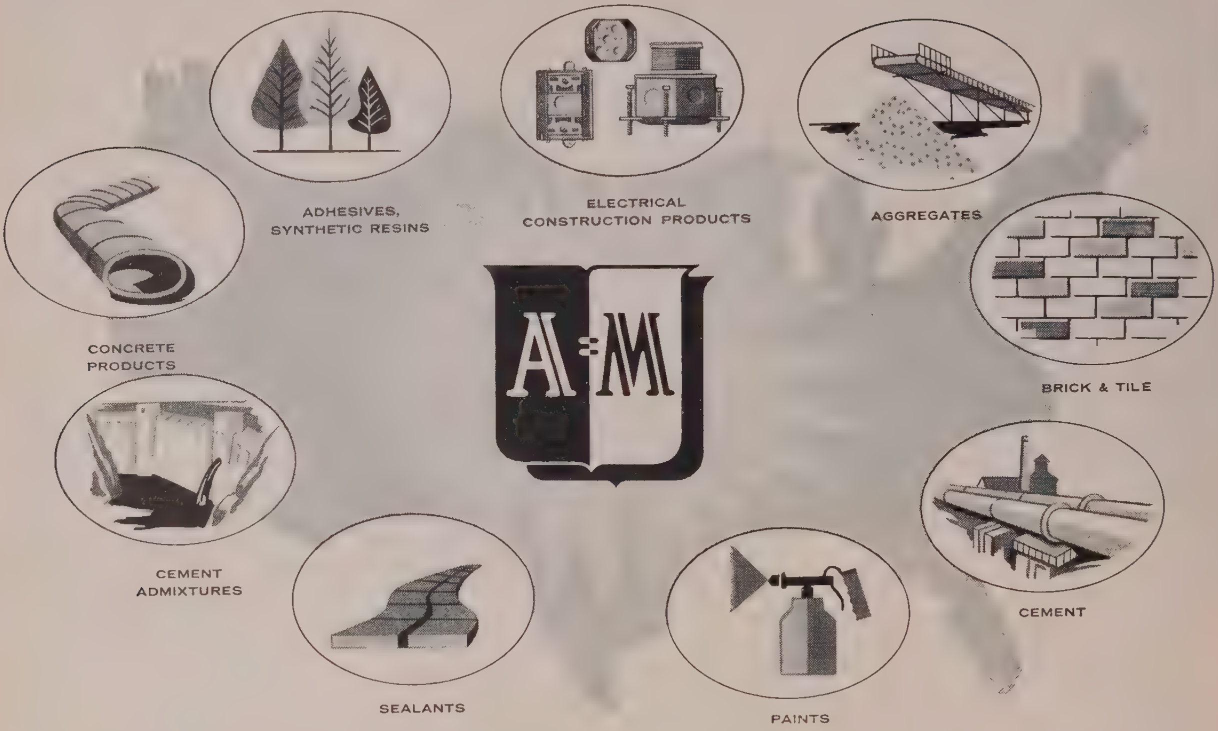

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How News Affects Market Trends

by Joseph Mindell

(Editor's note: Fifteen years ago, Mr. Mindell made an editorial appraisal of above subject. His observations are as pertinent today as they were then. We had hoped, however, that he would be able to bring his examples up-to-date; but our author suddenly underwent surgery. So, aside from minor corrections we are re-publishing his 1945 thoughts).

THE DAY-TO-DAY MARKET TREND often reflects the ebb and flow of emotional reactions to the news. Many people think that the market starts afresh each morning at the opening, depending for its direction upon the overnight news. This belief has enough surface appeal to make it the basic principle of the market letter and the financial column. The average financial commentator usually explains the market movements in terms of the daily news. This provides him with the simplest explanation and the one most readily acceptable to the reader or listener.

The proposition that the trend of the market follows the news is not accepted by the financially literate. For they know that the market often responds differently to the *same* type of news on different occasions. But even among the informed, the constant quest for news, when the market is exceptionally strong or weak, indicates an implicit acceptance of the fallacy as a working principle.

Would it be profitable to buy on good news and to sell on bad news as a general investment policy? Conventionally good news can be broken down into increased sales, increased earnings, increased dividends, new facilities, new markets, optimistic forecasts by highly placed officials, favorable political or cold war developments. Conventionally bad news includes decreased sales, decreased earnings, decreased dividends, closing of facilities, loss of markets, new competition, bearish forecasts by highly placed officials, adverse political or cold war developments.

However, we can recall many instances when good news was followed by declines and bad news by rises. In December 1942 gold mining was much in the news. It was feared that, as an industry unessential to the war effort, the gold mines would be forced to cease operations. This was dramatically bad news. Against this background of gloom, Homestake Mining omitted its dividend. The stock was slightly above its low price of 22½. Most of the fears about gold mines were in fact realized, and so the news was true. Nevertheless Homestake rose. A rise of more than 100% followed that bad news. At no time during the rise did comparably good news appear until the announcement that gold mining was to be resumed.

In late 1939 and early 1940, headlines giving the enormous backlogs for air frame manufacturers were featured day after day. Estimates of earnings at new peak levels of operations were very high. At that time, United Aircraft common was selling above 50. The optimistic earnings estimates were realized in fact, but the stock never went any higher.

Do these and the many other similar instances that can be cited represent a deliberate plot by our press to induce the investing public to buy at market tops and to sell at bottoms? No such conspiracy is evident. Then what is there in finance, news, the press, and the public which makes for this state of affairs?

What Constitutes News?

The collection, organization, and publication of news are influenced by the manner and possibilities of its collection, the orientation of the newspaper, and the desires and interests of its readers. It must be stressed that not *every* event becomes news. Before an event, or series of events, becomes news it has to make itself noticeable in some overt act. There are important but subtle developments in industry which do not develop so as to issue forth in news form. Also it must be remembered that the *whole* complex of conditions does not appear as news, but only that aspect which for some reason has become "newsworthy." Much of what becomes public and has contemporary interest is not easily handled in the daily press because of its complexity and the difficulty of understanding it without a great deal of background. Coverage of such material takes place in more specialized organs.

The structure of the newspaper, its approach to the reader, its problems of gathering, organizing, and presenting news are all relevant to our inquiry. The bulk of newspaper income is derived from the sale of advertising. Consequently that is a driving force in some newspapers. Advertising expenditures of business enterprise are usually related to sales. Therefore a large volume of sales for these business enterprises is desirable for newspapers.

Newspapers must reach the widest possible audience because advertising rates depend upon circulation. And the wider the audience the less the complexity permissible in the news. The average intelligence of the readers dictates the level of complexity possible in presentations which must be comprehensible for large heterogeneous masses of people. Also the newspapers must encourage attitudes favorable to buying and spending. A general

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Joseph Mindell is a partner with Marcus & Co., New York. His special interest is in industrial securities. He is a stock market technician and economist. Marcus & Co. is a member of the New York Stock Exchange and the American Stock Exchange.

haze of optimism is one of the means of accomplishing these ends.

This optimism is present not only in newspapers. It is a general characteristic of American enterprise. Possibly it is a heritage from our pioneer ancestors; the inevitable sentiment in a land with so much social mobilty among the classes, where every child may hope to become President. But in addition to the natural background of optimism, our press has a crucial economic need for fostering this sentiment in its coverage of business news.

Newspapers have to satisfy the public desires. If the public wants news about a war, the war must dominate the front page. If the public wants news on a particular football game, the scores will appear on the front page. The most highly experienced measurers of the public appetite for different types of news guide newspaper policy in deciding what should get on the front page. It has long been noticed that it is a warning signal when the stock market gets on the front page after long market advances. What is the reason for this? The shift of stock market news to the front page from its regular position on the inside pages reflects the intensity of public interest in the stock market, and important tops have usually been made during periods of intense public interest in the market.

Financial News

Financial news, as originated, is likely to be technical, complex, and often incomprehensible to the uninitiated. The average reader is not too comfortable in the presence of arrays of figures. The American newspaper has developed a dramatic or "catchy" style for appealing to its average reader, but unfortunately this type of treatment does not lend itself well to the handling of financial developments. Ratios, comparisons, figures in general have little news appeal for a populace scared of all but the simplest mathematical computations. So newspapers try to liven their financial stories with human interest (the industrialist's hobbies, and whether he sleeps with his pajama top on or off); personification (identification of complex business organizations with their titular heads); drama (the battle between steels and metals); rationalization and simplification.

Financial reporters are sometimes either not skilled enough in research and economic analysis or too hurried to do much of an analytic job. Besides, the journalistic job is not traditionally one of analysis, but rather one of reporting. In any event, it would be physically impossible for the newspapers to cover all company and trade events at first hand. They are therefore partially dependent upon releases sent them by publicity departments and agencies. These releases are framed to achieve certain objectives in public relations, as well as to convey information. The reader reads the material for information. However, the carefully phrased presentation of the "news" has an influence on him. Still, under present circumstances, if the newspapers were to reject all releases and attempt to gather the equivalent material at first hand, the cost of the business section of a newspaper would be prohibitive.

Financial news is to some extent large scale rationalization. There are *always* items of good and bad news available side by side. When the news is referred to as the explanation for the day's market movements, the items of good news are apt to be stressed on strong days and the items of bad news on weak days. An alert observer can often predict what news will be emphasized in financial columns the following day just by seeing what the market did. The press is a weathercock as well as an advocate.

Beyond all this, the mere appearance of financial news in itself makes for a sort of *overemphasis* of what is mentioned. An earnings statement may overemphasize, within the total picture, the importance of earnings completed months ago. One company showed earnings of $1.46 for 1944. Actually, at the time the figures were published, the earnings *rate* was practically nothing. Data on increased orders may focus attention too exclusively on that one part of the total picture. The merest rumor of merger has a bullish influence in rising markets, irrespective of the final outcome of the merger. Newsprint prices are marked up a few cents and the shares of a newsprint manufacturer rises 5% that day, even though study reveals that the resultant increase in the company's earnings amounts to less than 1%. Steel price increases may not bring the steel companies enough additional funds to pay for wage increases, but the newspaper announcement could bring higher prices for steel shares.

Authority of the Printed Word

In a culture where it enjoys such high authority, the printed word presents serious dangers, together with its great benefits of recording and communication. The mere fact that something appears in print gives it a certain substance. Yet, concerning most items of news, we do not know some of the essential evidential facts. Who wrote the story?; what were his sources of information?; and how dependable?

The financial press reinforces its traditional authority with other bids for authority. Notice the frequent references to: "dependable sources," "Washington sources," "unimpeachable sources," "well-informed bankers," "important financial quarters." These sources may or may not have been selected with care.

When the financial press states an idea over and over, the idea often wins deep acceptance. Sometimes it is fear of inflation, sometimes taxes. At other times it is order backlogs or wage costs. These repeated concepts become assumptions in financial thinking. They frequently reveal a naivete when read years later. Observe how in early 1937 the press—and many individuals—repeated the idea that a serious market decline was inconceivable because of low interest rates and the low level of brokers loans compared to 1929. Yet from a level of 194.40 in March 1937 the market declined to 98 in March 1938.

Rumors as News

Rumors are always circulating in the market place. They find a ready acceptance among speculators. Even normally intelligent and skeptical people are highly suggestible in the realm of finance. In hearings before the United States Committee on Banking and Currency, a testifying member of the New York Stock Exchange said rumors seem to be "incidental to the business." This germination and role of rumors in the market place goes back a long time. The saying, "Queen Anne is dead," is said to have been started in order to lower the price of English funds.

Each day's crop of rumors from the Exchange floors and the brokerage and banking offices is large and imaginative. And many of the rumors have enough of a core of possibility to win some sort of acceptance at least. In the natural course of events, the high pressure competition among newspapers heightens the possibility that some of the ill-founded rumors will appear in print.

Financial Community

Within the financial community, the news is sifted and restated in market flashes, letters, reports, and the like. Here too an optimistic bias is noticeable. The underlying economic reasons for this are simple to trace. The financial community's main source of revenue is commissions on security transactions. Since the volume of trading is larger in rising markets, and the investing public is more interested in buying during rising markets, a rising trend produces more commissions over longer periods. Combine this economic compulsion with the psychological one that a pessimist is unpopular in the financial community and with the investing public, even if he is right, and you have the forces which push the financial community toward optimism. Pessimism is permissible only when everybody is already pessimistic, as, for instance, after protracted market declines.

What is the causal relationship between the news and the market movements?

The problem of handling news in relation to any economic series presents many methodological difficulties. News is too ambiguous an entity for scientific handling with quantitative techniques. The verbal material and the imaginative response to it is hard to measure. It is difficult to isolate the news as a cause from other possible causes. How can we know, if the market moves a point on a specific day, how much was caused by the news of the day and how much by other forces?

Then too, what is good news and what is bad news may often be a matter of judgment and background. A 10% rise in a corporation's earnings might appear to be good news to a financial reporter, and yet be bad news to someone who had been expecting a 30% rise in earnings.

Further, we are not dealing with a manageable entity, and the goodness and badness of news is always relative. But, if we cut away all these methodological difficulties and take a rough-and-ready attitude toward the news, it is still simple to show that there is no dependable relation between news and security prices. We cannot plot a correlation.

Often the publication of good news is followed by rises, but sometimes by catastrophic declines. Concentration on the news itself is undependable. No inquiry of the news *per se* will throw light on its possible results in advance. There is no correlation, simple or inverse.

Kinds of News

However, there are different types of news. And an appreciation of these general types can aid us in better fitting news items into a general pattern. For convenience, news can be divided in three broad categories.

First, there is the most common type, the news that follows the market and tends to *accentuate* its movement. In the spring of 1943, a general market rise coincided with the widespread publication of favorable postwar plans, favorable postwar earnings estimates, figures on deferred demand and consumers' savings. Then in July 1943 the market started to decline. People expected the war to end soon. Quickly the news began to dramatize our lack of preparation for peace, reconversion problems, the size of inventories, disposal of surpluses, and severance pay problems. Rationalization plays a large part in most attempts to relate this type of news to market movements.

Second, there is discountable news. The normal process of the market is to discount important events before their emergence as news when these events can be anticipated by people of superior resources, understanding, and access to the market. In the spring of 1939 the market declined 30 points because of fear of the outbreak of war. From the middle of August to September it declined 12 points. The predominating news was associated with the outbreak of war. The general press anticipation was that, as in the First World War, the outbreak of war would bring about a collapse in the market. When the market opened after the outbreak of the war, there were two hours of selling, and then the market rose 30 points in about ten trading days. At the outbreak of the war most of the discounting had already occurred.

In April and May 1932 many great corporations cut or ommitted their dividends. This must be considered conventional bad news. In April the United States Steel dividend was omitted; in May the General Motors dividend was cut. In retrospect we can see that this particular bad news was coincident with the bottoming process for stocks.

These examples show that we always have the problem of when and whether the price has discounted the development behind the news. This is one of the *central* problems of investment practice.

Third, there is undiscountable news. Floods, fires, earthquakes, deaths are characteristic. Such news has a greater causal effort on the market than discountable news. President Roosevelt's death was an instance. The real problem with undiscountable news is to determine whether or not the event ushers in an important new set of circumstances.

News which caps a turning point in the market or which runs counter to the trend is the most deceptive. This news can come from any of our types.

On Nov. 8, 1938, the Dow-Jones industrial average rose above 158. Excitement ran high on Republican election victories. The financial press emphasized this as a major bullish market influence. The market turned down immediately and declined to 120 in April 1939.

On November 7, 1940, Treasury Secretary Henry Morgenthau made his famous inflation statement. The public attitudes on inflation gave his statement inflammatory effect. The market rose 5.77 points that day, carrying the Dow-Jones industrial average to 137.75. Was this a case of important news inducing a rise? That was the general impression of the press the next day. But then the market declined to 92 in April 1942.

In July 1943 newsprint prices were raised four dollars a ton. An average of paper stocks was 72 when the news was issued. The average did not rise, and four months later it was down to 61, a loss of over 15%. It might have been relevent to observe that the paper stocks had been rising strongly *before* the news came out.

During October 1937 an Interstate Commerce Commission rate decision was expected. Featured in the news was the story that the rails would gain between $40,000,000 and $50,000,000 annually if the increases were allowed. Rail stocks rallied. The Interstate Commerce Commission granted $47,000,000, which was high in the range of expectations. Southern Pacific, to take a typical example, rallied from 20 to 25. Excitement ran high. But Southern Pacific then sold down below 10. The downward trend of carloadings and net income was relevant here.

CONCLUSIONS

The great difficulty is that there are *many* influences which determine the movements of security prices. We cannot isolate one variable (the news) from the causal complex and designate it as *the* cause, for the other variables exert their pressures on prices. We have to study the forces at work, try to ascertain their effects, and then make some sort of composite picture. It is true that these forces often do emerge as news, but this appearance as news is piecemeal, chronologically haphazard, and often contradictory.

Long and detailed observation of the market in its response to news will convince us how much wiser the *market as a whole* usually is, in its responses to the news than the average participant in the market. For the market, whatever the development it is trying to discount, always includes among its members some investors who are experts in the particular subject at issue (steel, gold, oil, and so on). To the outsider, the strength or weakness of a stock may seem wholly inexplicable until months later.

It must be remembered that financial developments, as they become news, represent a *late* stage of the unfolding of constantly flowing economic processes. Before some stage of the process emerges as news many people can foresee the changes in sales, earnings, dividends, new products, and so forth. Therefore those who act on the news may be late-comers to the feast.

What the news is may be of less importance than how the market responds to it. News flowing *with* the trend presents no problem. It becomes deceptive when it reaches a turning point and when it runs against the trend. These warnings about news seem pertinent:

1. Beware of magnifying the news. Set it in the total picture.
2. Beware of attributing too much causal effect to news.
3. Beware of granting any statement authority just because it appears in print.

These questions, applied to news developments, can yield helpful answers:

1. Has similar news produced uniform market effects in the past?
2. How long has the present trend of good or bad news been in force?
3. How effectively is the market exploiting items of good and bad news?
4. Could it have been foreseen and discounted or is it undiscountable news?

(Relative to financial news coverage by newspapers, we would like to state that such coverage has improved immensely over the past 15 years and a few of the country's leading newspapers employ financial writers, men and women, who not only contribute daily in a learned manner, but who have even written books of consequence about investments and other financial activities.—Ed.)

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'Switch Currencies' and Other 'Monetary Mysteries'

by John Fountain

When an American buys a foreign stock or foreign internal bond—a popular pastime these days—he necessarily involves himself in problems of foreign exchange. That these problems are solved for him by others behind the scenes, and that he and even his broker do not know of them, does not mean that they do not exist.

One of the most popular stocks on the New York Stock Exchange is Royal Dutch Petroleum, yet how many investors realize that in buying Royal Dutch they have acquired a blocked investment in Holland that, so far as the regulations of the Bank of the Netherlands are concerned, may remain blocked forever, with no provision that the Dutch guilders it represents can ever be converted to dollars in the normal way? Perhaps one in a thousand, or one in ten thousand, of ordinary investors knows this, and the proportion among professional investors and brokers is probably little higher.

Countries With Blocked Currencies

Blocked exchange is part of the order of things for those who invest in Great Britain, and the sterling area generally, Holland, Belgium, Italy, Scandinavia, Japan and many smaller nations. France and Germany have only recently been removed from this list, and not too long ago every important country in the world outside the United States, Switzerland and Venezuela had a currency quoted below par, and most of these countries had blocked their currencies as well.

To understand what blocked exchange is, one must first understand the elements of the foreign exchange process. When you have pounds and want dollars you cannot really "convert" or "transfer" the pounds to dollars—that would require one of those toy magic money machines where you could feed in pound notes on one side and get out dollar notes on the other. What you have to do to convert your pounds into dollars is to sell them to someone who wants pounds and will pay you dollars.

In normal times you sell to a bank, which directly or indirectly has clients who have dollars but want to have pounds. These most likely would be people importing goods from England; but in normal times all pounds are alike and it might be a tourist planning to go to England, or a company building a plant in Britain, or a buyer for any of hundreds of legitimate uses. If it happened that nobody at all wanted to give dollars for pounds, then your pounds, indirectly would be bought by the Bank of England who would pay for them in dollars it had in stock or obtained by selling gold.

What if Pounds Are Blocked?

What happens, then, if your pounds are blocked? The Bank of England says that people who buy your pounds can *not* use them for any and all purposes as they could before; and it also says that the Bank of England itself will *not* buy them for dollars. The value of your pounds then depends on what the Bank says they can be used for, and to whom it allows you to sell them. If it says the pounds cannot be used for anything, or if it says they cannot be transferred to someone else, then they are worthless for the time being. If it says they can be used only for the rental of grouse moors in Scotland, then they will be almost worthless because the demand for "grouse moor pounds" as the market will call them, will be far less than the supply. If the Bank goes on to say that only you yourself can rent a grouse moor with your pounds, then your pounds, though they may have some value to you, will have no market value because nobody will buy them.

Thus, the marketability of a blocked currency depends on the ability to transfer title to it to somebody else, and the value depends on supply and demand—the uses to which it can be put; the demand for those uses; and the available supply of that particular kind of blocked currency. In principle, markets for blocked exchanges are free markets, without official supports and pegs.

Even those who should understand these matters sometimes display amazing ignorance. A South African broker's letter complains that American use of switch sterling causes South Africa to lose dollars and the Johannesburg Stock Exchange to lose business and international prestige. In Australia the Exchange Control Board, which is of course the official creator of blocked exchange, looks on that commodity in somewhat the way the United States Government looks on narcotics—something necessary but too easily turned to immoral purposes, and requiring the strictest control to prevent misuse. If such ignorance persists in the homes of

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blocked currencies, one can hardly blame the investor here who says he wants to buy British securities but only with dollars, and not get involved with that "incomprehensible switch sterling stuff."

A Bit of Monetary History

Blocked exchange probably began with devious schemes of the Nazi's Dr. Hjalmar Schacht in the early 1930's. In those days it was thought incredible that there should be more than half-a-dozen kinds of German Reichsmarks all selling at different prices.

The real complexities did not begin, however, till World War II when the ingenious British mind went to work on the problem. At the outbreak of the war there was, of course, some liquidation of British investments, but this was not serious in the early "phony war" stage. Matters took a different turn when the Germans invaded the Low Countries; and on May 13, 1940 the Bank of England, facing a run on its exchange reserves, refused to sell dollars for pounds when the pounds came from the sale of British investments.

Foreigners were still free to sell British securities, but the proceeds of their sales could not be remitted—the Bank would not supply dollars. Not only could they not be remitted, but they could not be realized on at all, because they could not be transferred to another owner. The funds were left lying in British banks with no use whatever. This lasted till a Wall Street genius, now retired, cabled one day to his firm's London office to ask the Bank of England if blocked sterling could be used to buy British Government bonds. Unexpectedly, the answer was "yes," and a new business was born.

There was at the time a considerable speculative demand in this country for British Government sterling bonds which were selling at low dollar prices, and for a while this particular firm had a profitable monopoly. Blocked British securities were bought for dollars here, sold in London to realize blocked pounds, and the latter used to buy British Government bonds for resale here. Since blocked balances in banks could not be transferred directly, owners of blocked pounds had to be guided into buying bonds which could then be sold for dollars, there being no restriction on the transfer of the bonds.

Eventually the secret was disclosed, and the competition moved in. The name "switch" for blocked sterling came from the "switching" from one British security to another. Since the main and, usually, the only possible use of switch sterling is to buy securities, the term "security" sterling is also used, but the pros call it switch.

In the years immediately after the war securities trading became more active and British Exchange Control Board at the Bank of England devised complicated rules that caused a proliferation of switch sterling that must have gone beyond Dr. Schacht's wildest nightmares. There was "Government switch," "oil switch," "industrial switch," and various other types of switch usable only to buy specific types of securities. Each kind of switch was further distinguished by the country of residence of its owner, and there were restrictions between countries—an American could not use switch owned by a Canadian or a Frenchman.

Thus, "Brazilian Government switch" meant switch sterling that a resident of Brazil could use to buy British Government bonds with, but not British industrial stocks, and which could not (in principle) be transferred to or owned by a resident of Sweden or Italy or the United States. "Canadian Rhodesian mining switch" would be switch sterling owned by a resident of Canada, usable only by another resident of Canada, to buy Rhodesian mining stocks.

Besides all these, there were other kinds of sterling as well, including an enormous family of "transferable" sterlings, so-called, although except for one kind they were not freely transferable, and still other sterlings whose complications need not detain us here. The "Financial Times" of London once counted 300 kinds of British sterling alone, and each sterling country from Iceland to South Africa and the Bahamas to Australia, had the potentiality of as many more. Each kind, in addition to its specified use, might perhaps be used for other things, if one knew the rules and policies of the local exchange control board and the Bank of England. In those days the spread between bid and asked prices for these special kinds of pounds was four cents and up, and the foreign exchange trader who understood them all and their manifold uses earned the high pay he got.

At last the knots began to be untied. The distinction of switch by type of security was dropped Sept. 1, 1950. The distinction between countries of ownership was dropped gradually and more recently; United States and Canadian switch were merged into one class of "dollar switch"; the Continental countries were combined for "Continental" switch, to which other soft-currency areas were later added. At the same time the various transferable sterlings were being combined; and so far as foreign investors are concerned the whole system has been boiled down into two kinds of British sterling, "external," the hard kind of sterling convertible into dollars or any other currency at the official rate of exchange, and "switch," technically not convertible at all.

Transfering Switch Balances

Before leaving the history of switch sterling, another development should be mentioned. At first, switch sterling balances could not be transferred directly from one owner to another. American broker "A" holding South African mining switch could not sell it to American broker "B" wanting to buy a South African mining stock. Broker "A" could buy the stock for broker "B" in a prearranged transaction, or he could buy a stock that he thought broker "B" or someone else might want, sell it for dollars, and get his money back that way.

After 1950, when the various distinctions of switch by type of security were abolished, matters became simpler. Broker "A" simply bought a stable British Government bond (of over 10 years' maturity as required by the rules) and transferred that to broker "B" who paid him in dollars. Finally, to oblige their American friends, London firms developed well-oiled machinery for making these "put throughs" at a differential of only 1/16th of 1%. This made the whole business a farce, and the Exchange Control Board at the Bank of England, which has always been willing to learn, simply abolished it by permitting direct transfers of blocked balances from one non-resident owner to another.

We might take a look at some of the ups and downs of switch sterling. When trading began in 1940, the price was $1.50 to the pound (which then had a *de facto* parity of $4.03) and in the dark days of March 1941 it reached an all-time low of $1.35. Toward the end of 1945 and in early 1946, for a brief interval, it almost reached its $4.03 parity. When the value of the pound sterling was cut from $4.03 to $2.80 on September 18, 1949 the various kinds of switch at the time were unchanged or off only a few cents from their close of the previous trading day, and perversely, they soon began to go up. There has been no further devaluation, and switch has not been below $2.00 since 1950, and only once since 1952, for a few days in 1956, has it sold below $2.50. On Dec. 30, 1958, it reached $2.80, the present parity, for the first time in over 12 years, but for a long time thereafter hovered about half a cent below the price of official sterling which has a pegged range of $2.78 low, $2.82 high.

Recent Developments

In 1960, the demand for switch sterling, after 20 years, finally outran the supply, and switch sterling moved up to the official rate. While the precise cause of this can only be guessed, it seems not unlikely that although there has been much buying of British stocks, it has been the original use for switch—the buying of British Government bonds—that put it up to par. While British regulations forbid foreigners' borrowing pounds to buy securities, it has been possible to borrow dollars from Canadian or American banks on pledge of British Government sterling bonds as collateral. With margin requirements reported as low as 20 or even 10%, it is easy to see how the demand for switch can be multiplied—the borrowed dollars buy switch which is used to buy bonds that are pledged as collateral. This could have a considerable effect on the future of switch sterling (supposing it is not abolished meanwhile) as will be shown.

When switch sterling reaches parity with official rate ("external") sterling, it loses its advantage of cheapness, and if it happens, and it does happen now-a-days, that there is no switch available, or official-rate sterling is offered a fraction of a cent cheaper, then official-rate sterling is used instead of switch to buy British bonds and stocks. However, once invested official-rate sterling becomes switch sterling—for ever more if invested in a stock, or till redemption if invested in a bond. Thus, the supply of switch sterling has been enormously increased and when today's buyers become tomorrow's sellers we may see price changes.

Do ADR's (American Depositary Receipts) for foreign stocks avoid the risk of a decline in switch sterling or other switch currencies? The answer, of course, is "no." The price of a typical ARD for a British stock, for example, is set by two things, the price of the stock in London times the exchange rate for the pounds used to buy it. If the dollar price gets out of line on the down side, arbitragers buy ADR's for dollars in New York, sell the underlying stock in London and then sell the switch pounds they receive to get their dollars back again. If the London price of the stock or the price of switch sterling, or both, drop when the ADR price remains firm, arbitragers buy in London and sell the corresponding ADR's in New York, depressing the New York price. Thus a drop in the value of switch pounds will immediately be reflected in the dollar price of ADR's, often without any sales, and arbitrage firms will merely lower their bids and offers.

GEOGRAPHICAL ROUND-UP

Taking a look now at some other countries, Holland after World War II set up a system modeled on England. So far as Americans were concerned there were two important kinds of switch guilders, "international" and all other. The international guilders were those eligible to buy and receivable on sale of the so-called international stocks, the ever-popular Royal Dutch, Unilever, Philips, and a couple of others.

In April 1954 the distinction was abolished, and restrictions distinguishing between residents of various foreign countries were gradually lifted, so that at present switch ("K account") guilders are virtually all the same. They are still blocked however, and an American who sold his Royal Dutch or Philips Lamp on the Amsterdam Stock Exchange would find that he could not use the proceeds to pay his hotel bill at the Amstel, or buy tulip bulbs or Edam cheeses, though he could use them to buy other Dutch stocks or bonds, or sell the guilders for dollars to a Dutch bank which would resell them to some foreign broker. Holland is a small country with several big companies that are popular with investors everywhere, so it is not surprising that the demand for Dutch stocks enabled the switch guilder far to outrun the switch pound in the race to par, which it reached and held in 1954.

One might suppose that Holland would follow the example of Germany and France and abolish blocking; but the Bank of the Netherlands seems content with things as they are. If the trend of the third quarter of 1960 toward reduced buying of Dutch securities by foreigners continued, one may again see the switch guilder at a discount.

In Belgium the blocked "financial franc" reached parity about the same time as the guilder. Belgian securities had not been widely held by investors outside the country, so although the demand for them remained small, the supply of switch francs was also small and the market easily firmed. Those who had forgotten or never knew of the existence of the switch franc had a disagreeable shock in 1960 when troubles in the Congo sent it to a discount for the first time in six years.

In Germany after the currency reform of 1948 the blocked Deutsche Mark sold at about one-quarter of its official parity of 23.8 cents, and those who did not buy German stocks "when"—like those who did not buy Dutch stocks "when"—can add to their misery by remembering this. The German recovery was so rapid that not only did the switch Mark ("capital Mark") reach par in a few years, but it overshot the target and went to a premium. Unlike the British and the Dutch, who have always been happy to have investors use their official-rate currencies to buy securities, the Germans tried to stem the inflow of funds to their booming economy by allowing *only* switch Marks to be used to buy securities. This requirement and all blocking was abolished at the end of 1958 and the Deutsche Mark is now a free, hard currency.

In France, a country which like Belgium has not had many of its securities held by foreign investors, proceeds of security sales were blocked after the war. But the switch franc ("compte capital") was not important and after the 1949 revaluation sold at only a moderate discount. The floating supply of switch francs was cleaned up at least twice when the Bank of France, for limited periods, allowed transfer at the official rate of exchange. Blocking was abolished with the currency reform on December 29, 1958.

The history of the switch lira in Italy has more or less followed that of its northern neighbors, but it is still a blocked currency.

Present Monetary Conditions

Now-a-days switch currencies, in the principal European countries that have them, follow a generally similar set of simple rules like these:

1. Foreigners may buy market stocks and long-term bonds with switch currency, but they may not use switch to buy short-term bonds or securities expressed in a foreign currency.
2. When they sell, whether they bought with official-rate or switch currency, they receive switch currency.
3. Holders of switch currency may reinvest it, or sell it to someone else in their own or a third country, for payment in dollars (or any other currency).
4. Holders of blocked (switch) securities receive interest and dividends in official-rate currency, and if bonds or preferred stocks mature, or are called for redemption, they are paid in official-rate currency.
5. Fully-registered securities bought with switch may be exported.

Naturally the rules are really more complicated, as there are all sorts of obvious and hidden holes that must be plugged. When switch sterling was selling at a huge discount, scarcely a day went by without those in the business being offered some "cute" scheme for buying American stocks in London with switch sterling and selling them for dollars in New York. Sometimes the schemers noticed that American stocks were selling at very curious prices in London and this was the beginning of their education, but in any case the answer was simple and chilling: switch sterling could not (and can not) be used to buy anything but sterling securities. The man who thought he would buy British short-terms with switch and collect in official-rate sterling at maturity discovered that switch sterling was not usable for buying anything maturing in less than 10 years (it is now five).

With all the implicit threats of investment in a country that blocks foreigners' securities, one might wonder if it is not possible to get a guarantee that will avoid this. Strangely enough, in some countries it is or has been possible but very few have wanted it. England once offered a "M license" that guaranteed those who used official-rate sterling to buy securities would get back official-rate sterling when they sold. The issuing of these licenses was discontinued after a short time, presumably because there were so few takers.

France had a similar license, and Italy and South Africa still offer them. Interest in the South African arrangement has increased a little now that South Africa is about to become a republic. No ADR's are available for stocks bought under such guarantees, though, there is no reason why the ADR banks could not issue them if the demand were there. None of these countries has ever offered a guarantee against devaluation.

'The Australian Ideal'

When one goes beyond Europe and the nearer parts of the sterling area one begins to reach countries where "blocking" can mean just that. Perhaps the first country from the standpoint of investor interest is Australia, mentioned at the beginning of this article. The Bank of England, like a permissive mother, sets rules for her children in the sterling area, but does not insist that they follow them. Generally speaking those in Africa, the West Indies, New Zealand, and some other outlying parts do follow them, and it is not surprising that some of the sterling area countries in Asia cannot afford to. Australia, however, in the literal sense, has been unruly. Whereas in Auckland, or Nairobi, or the Falkland Islands, switch sterling is just about what it is in London, in Sydney and Melbourne one never knows.

The basis of investment in the sterling area outside Britain is that although the investment is blocked, if sold, the proceeds can be remitted in the form of switch pounds to a switch account in London. Once there they can be sold to an American broker who wants it to buy British securities or even to send it to Johannesburg or elsewhere in the sterling area to buy local securities. Thus, a blocked investment in some remote part of the sterling area, so far as concerns the foreign exchange, may offer no greater risk than a stock listed on the Stock Exchange in London.

The Australians however, have always looked askance at this. They have often forbidden switch pounds to be remitted from Australia to London, and have sometimes forbidden the export of switch sterling securities, even in fully-registered form. (Since transfer of fully-registered securities can readily be made subject to complete control by the authorities, most blocked-currency countries permit their export. In Holland, where bearer securities are the rule, an export certificate takes the place of registration).

The Australian ideal is that foreigners buying Australian securities should buy with official-rate pounds. With official-rate pounds costing no more than switch pounds, the Australians are now having their way, and in return they pay official-rate pounds to these investors when they sell (unless profits are considered unreasonable). Unlike South Africa, however, they do not offer a guarantee, and the specter remains: what will happen if the Australians find they cannot repay foreign investors at par? Shall we see again that unmanageable and sometimes unsaleable commodity, Australian switch?

'The Japanese Complex'

When the Japanese framed regulations to permit foreign buying of their securities after the war they had a unique opportunity to set up a switch system. Old foreign holdings of Japanese securities were virtually nil, so there would have been no switch yen offered for sale except from occasional new investors selling out. Switch yen would therefore have sold close to par, or in fact, been unavailable a large part of the time.

The steady volume of American investment would have had to enter Japan via the official rate market, so that Japan would have gained dollars with almost every purchase, but since these new investments would have been blocked, there would have been no contingent liability to repay dollars some day. With straight-forward foreign exchange regulations, the probabilities are that American investment would have been far larger than it has been, and the Japanese gain in dollar reserves would have been much larger than it has been.

However the Japanese avoided a switch yen system, or almost avoided it; switching in Japanese securities is possible by cumbersome maneuvers reminiscent of the earliest days of British blocked exchange. Instead of the simple switch system of England and Holland, which says "if you invest your money here you'll never get it back from us," the Japanese have set up a system that makes one think of those pagoda masts of a Japanese battleship; regulations loaded with every conceivable complicated device, including guarantees of repatriation (after a while) of the proceeds of sale. A switch system has been under discussion in Japan recently, especially as ADR's, for Japanese stocks are wanted and a switch system is almost a necessity for these. However, a switch system ostensibly means a free market, a prospect distasteful to the bureaucratic mind. It is a tribute to the enterprise of Japanese businessmen and brokers that they have made Japanese stocks attractive enough that foreigners will buy them despite the official obstacles put in their way.

The latest currency to be blocked is the Venezuelan bolivar, for many years one of the hardest currencies in the world, devalued less than the United States dollar after 1933. New regulations permit a switch system, but seem hastily conceived and likely to undergo many changes; some obvious lessons of other countries with blocked exchange were not learned.

While speaking of blocked securities and exchanges it is worth taking a look at an odd phenomenon, blocking in reverse, when foreign investors are blocked out instead of being blocked in. This was the case in Germany, and now prevails in Sweden, where switch kronor are the only kind of kronor a foreigner can use to buy Swedish securities in Sweden. The would-be investor must buy these switch kronor from another foreign investor who is selling out, and currently he pays a premium of 15%. Switzerland would be a logical recruit for this kind of regulation. Although it now has a gentleman's agreement among its bankers to keep foreigners from buying Swiss securities, the agreement seems to be ineffective, and quite a few Swiss stocks are selling so high and yielding so little that what with income and property taxes, it costs a Swiss citizen out-of-pocket cash to be an owner of them.

THE OUTLOOK

What is the future of blocked exchanges? Will controls gradually be loosened so that we go back to the unfettered days before World War I, or even the less complicated ways of the 1920's and 1930's, or will blocked exchange and currency controls increase till every country has them? The writer guesses the latter. Blocking exchange is an effective, simple and not too burdensome way of stemming the flow of hot money that flows so rapidly from one country to another these days.

The Bank of England has shown that a central bank by judicious rules, opening and closing of loopholes by special licenses, and perhaps by direct intervention in the market, can control the switch market almost as effectively as it controls a gold-backed currency. Foreign exchange looks like another field where Government has moved in to stay.

Something Else 'New' — Edge Act Corporations

In 1919 Senator Walter E. Edge, of New Jersey, wrote an amendment to the Federal Reserve Act aimed at encouraging a flow of U. S. funds to foreign countries, and at the same time act as a stimulus to U. S. export trade. And while this new measure was of interest to banks and other financial institutions, there was no great rush to set up such corporations.

In fact, by the time of our great depression there were only three Edge Act corporations extant and they were soon liquidated at some loss.

Now, 41 years later, bankers are taking a second look at the money-making possibilities of the so-called Edge Act corporations, the biggest of which is Bank of America (International). These are federally-chartered corporations, with authority to deal in foreign banking, investments and financing under supervision of the Federal Reserve Board.

And although the emphasis is on investment, these corporations may make long-term and medium-term loans and invest in stock of foreign companies. Profit potentials sometimes range as high as 30% on long-term loans. Most Edge Act corporations, to date, are capitalized at the minimum of $2 million.

Behold the gated oscillator – genus electronics; natural habitat circuits, esp. digital volt-ohm meters ● Strange names abound in the work-world where physical, chemical and biological phenomena are converted into electrical signals. Uncommon names, in common use whenever there's need to present hitherto unknown or hard-to-come-by information ● An amino acid analyzer probes a protein for pharmaceutical research… an infrared spectrophotometer ferrets out the complex nature of an organic compound…a gas chromatograph analyzes and records the composition of a process stream… a data handling system monitors a nuclear reactor ● They're all of a lineage long distinguished for exemplary performance, even under most difficult conditions. And regardless of their sometimes numbing nomenclature, all uphold the family tradition – behaving perfectly in any scientific circumstance ● The family name is Beckman.

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Investment Companies: Performances vs. Charges

by Wayne P. Hochmuth and Arthur S. Bowes, Jr.

PART ONE: THE PROBLEM OF MEASURING PERFORMANCE

AT LEAST SIX MAJOR FINANCIAL SERVICE organizations currently measure the performances of investment companies and publish information about them on a regular basis.[1] All of these services rely, of course, on the same basic historical data; yet the differing methods they use in working with these data lead not only to differing results, but to results which some Financial Analysts—let alone the typical investor—may find confusing.

Although numerous articles have appeared on the subject of investment company performance in recent years, many of them seem to be written with a partisan outlook. Few of them—including those whose authors attempt to be objective—have comprehensively delved into the limitations inherent in the methods currently used to measure performance. None, in our opinion, has adequately grappled with the problems involved in measuring performance *from the investor's viewpoint.*

The purpose of *Part One* of this article will be to examine the techniques commonly used in measuring performance, so that their limitations might be more generally recognized. This analysis will also serve to pinpoint the major problems encountered when the performance of investment companies is evaluated.

The problem areas to be explored are as follows: (1) purchasing and closing charges; (2) Federal income and capital gain taxes; (3) reinvestment assumptions; (4) inter-company comparisons; (5) time periods; and (6) external yardsticks. The analysis undertaken in *Part One* will serve as the foundation for *Part Two*. In the second portion of the article (to be published in the March-April 1961 issue) a method designed to overcome or alleviate the problems discussed below will be presented. Subsequently, this method will be used in measuring the performances of a number of mutual and closed-end funds. The results obtained will then be utilized in reaching a conclusion as to whether investment company performances justify their charges.

One major problem encountered in measuring performance is that of handling the costs incurred by the investor in entering and leaving an investment company. All of the services do call the reader's attention to the fact that sales ("load") charges and redemption fees are levied by some mutual funds; and that brokerage commissions must be paid on transactions involving closed-end shares. Nevertheless, three of these services—two of which are probably the most widely used—employ measuring methods which effectively ignore such costs.[2] The effects of purchasing and closing charges on the results obtained by the investor are important *because they vary from fund-to-fund.* Such costs range from none at all, to 9% of the initial investment, and typically amount to 7½-8½% of the capital invested in a mutual fund.[3]

The purchase charge is significant in two respects. First of all it immediately reduces the amount of the investor's capital. Thus, before the new shareholder's initial investment can be recovered, appreciation in the net asset value (mutuals) or market value (closed-ends) of his shares must equal or exceed the purchase charge. Secondly, this charge reduces the amount of capital at work for the investor. For example, $10,000 would purchase a full $10,000 worth of net assets in the Scudder, Stevens & Clark Fund, a mutual which has no load charge. It would purchase only $9,100 worth of net assets in Commonwealth International Corporation, a mutual which has a 9% load charge. Assuming current commission rates, it would purchase about $9,880 worth of market value of stock in U. S. & Foreign Securities Corporation, a closed-end fund. If the two mutual funds named above were both to earn 5% on net assets after expenses, the $10,000 investment in the Scudder Fund would return $500 to the investor, while the same amount invested in the Commonwealth International Corporation would return only $455.

If the market value and the net asset value of U. S. & Foreign Securities Corporation shares happened to be the same, the $10,000 invested in this fund would return about $494. However, since the market and net asset value of the shares of a closed-end fund rarely are the same—indeed the market value typically is less than the net asset value—the investment in this closed-end fund probably would yield an amount greater than $494 in a situation where 5% was earned on net assets after expenses.

The foregoing example illustrates the fact that purchase charges can substantially affect the return received by the investor. However, it does not follow that a "no

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[1] For footnotes see Appendix.

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load" fund is necessarily a better investment vehicle than a fund with a 9% load charge. First of all, the management of one fund may be more astute than that of another. Thus, if the management of a fund with a 9% load charge consistently outperforms the management of a "no load" fund, over a period of years, the total gain achieved by shareholders in the former fund may well exceed those achieved by shareholders in the latter fund. Secondly, annual management fees and operating expenses vary from fund-to-fund. Should two managements be equally astute in that their respective funds each earn 5% on net assets before expenses, the fund with the lower annual expense ratio might well achieve the greater net return for the investor over the long run, even though the initial load charge it levied was higher.

Closing Charges

Redemption fees and final broker's commissions also warrant comment.

Redemption fees are relatively unimportant since they are levied by only a few funds, and even when they do exist, they usually amount to less than 1% of net asset value. Furthermore, the redemption fee is a terminal charge, and does not, therefore, reduce the capital working for the investor while he remains in the fund. Brokerage commissions are somewhat more important, however, because the buyer of shares in a closed-end fund must pay a commission at the time he acquires them, and then again when he sells them. Therefore, the difference between the charges on a mutual fund purchase and sale, and the commissions on a closed-end fund purchase and sale, is not so great as it might seem at first.

If stock prices enjoy a considerable rise between the time an investment is made and then redeemed, the total brokerage commissions paid on the closed-end shares may exceed the total charges paid on the open-end shares. For example, one investor might pay a load charge of $75 on an initial investment of $1,000 in a mutual company, but no fees at all when he redeems his shares for, say, $3,000 twenty years later. Thus, his aggregate purchasing and closing charges amount to $75. On the other hand, another investor who acquires low priced shares in a closed-end fund, and then sells these shares 20 years later—after the market price of his stock has tripled—might pay approximately $100 in commissions on the round trip, as illustrated below:

	Commission
Purchase of 500 shares at $2.00	$ 35
Sale of 500 shares at $6.00	65
Total	$100

There are various other fees and taxes associated with the purchase or sale of mutual fund and closed-end shares, but they are of negligible importance. To include them in a formula for measuring performance would require an expenditure of time and effort not justified by the significance of the slightly more refined results obtained.

Federal Income, and Capital Gain Taxes[4]

Methods which measure performance without specifically recognizing tax considerations fall down on three major counts: (1) they show results which overstate the amount of gain which the investor could have actually retained; (2) they show results which may be misleading in that they fail to give weight to the fact that a dollar in capital gain before taxes is worth more to the shareholder than a dollar in ordinary investment income before taxes; and (3) they lead to results which, when reinvestment of dividends is assumed, are based not strictly on *re*investment, but rather on *incremental investment.*

Point (1) hardly need be elaborated. Obviously the amount of total gain actually at the disposal of the shareholder who must pay taxes is substantially less than the amount shown by methods which ignore taxes.

Point (2) is perhaps not quite so obvious. An example may help to clarify the concept. Assume that the results achieved over a 10-year period by two funds, A and B, are to be compared. The funds make identical load and redemption charges, and $1,000 is invested in each fund. Under the common method used in measuring performance, total gain would be computed as follows:

	Fund A	Fund B
Ordinary income dividends	$ 700	$ 300
Realized capital gain distributions	200	600
Cash distributions	$ 900	$ 900
Appreciation in net asset value	1500	1475
Total gain	$2400	$2375

The figures shown above suggest that Fund A achieved a slight edge over Fund B during the period. However, if tax factors are considered, and it is assumed that the investor is in the 30% bracket, total gain would be as shown below:

	Fund A		Fund B	
Ordinary income dividends	$ 700		$ 300	
Less: 30% tax thereon	210	$ 490	90	$ 210
Add: 4% dividend tax credit		28		12
Realized capital gain distributions	$ 200		$ 600	
Less: 15% tax thereon	30	170	90	510
Cash distributions after tax		$ 688		$ 732
Appreciation in net asset value	$1500		$1475	
Less: 15% tax thereon	225	1275	221	1254
Total gain after tax		$1963		$1986

The illustration above indicates that when tax factors are included in the formula for measuring performance, not only do the results obtained more closely approximate those achieved by the investor, but the relative ranking positions of funds may be changed. Naturally, the higher the tax bracket assumed, the more important the consideration of taxes becomes.

However, it should be stressed that the illustration used does not typify a situation which is common among funds with *similar* investment objectives. Indeed, after calculating performance results for a number of similar investment companies, we found that although consideration of tax factors does lead to some changes in relative ranking positions in particular periods, on the whole the ranking positions tend to remain the same whether the formula assumes a tax-exempt, a 22%, or a 50% bracket. We feel therefore, that the chief advantage in taking taxes into consideration is that such a procedure leads to a more realistic picture of the results actually achieved by the investor, particularly when reinvestment is assumed.

The reason tax considerations increase in importance when reinvestment is assumed is brought out by point (3) above. Measuring methods which employ reinvestment assumptions—but which ignore tax considerations—lead to results which are dependent on an *increase* in investment, rather than just a *re*investment of distributions. This process serves to magnify the otherwise marginal differences in the types of distributions achieved by similar funds. An effective increase in the shareholder's investment occurs during the process of reinvestment of distributions, because the tax must be paid on these distributions whether they are in the form of cash or in the form of additional shares. For example, when a shareholder in the 20% tax bracket accepts stock worth $100 in lieu of cash for realized capital gains, he must pay, by the end of his tax year, $10 to the Internal Revenue Service. Thus, he has not merely reinvested his realized capital gain, but has, in effect, increased the amount of his investment.

Since the services which measure performance do not take this fact into account in their reinvestment assumptions, they publish results (often in the form of charts with enticingly upsweeping lines) which tend to convey an unrealistic impression to the investor. Even though the funds and the services do note that no adjustment has been made for any income taxes payable by shareholders on reinvested distributions, the fact remains that few investors appreciate the snow-balling effect of compounded returns, and therefore tend to equate the picture of substantial growth laid out before them with what they could have actually achieved by investing in a fund.

Treatment of Realized Capital Gain

A law enacted in 1956 permits investment companies to retain realized capital gains, but on any gains so retained, the fund must pay the 25% maximum capital gains tax. However, if a fund retains realized capital gains, the investor shows the tax paid for him by the fund on his own tax return, and he may claim a credit or refund if the amount of tax withheld is more than that which is due from him as a low bracket taxpayer. Thus, even if capital gains are retained by the fund—and few funds have elected to do so thus far—the applicable tax rate, from investor's point of view, is still the rate determined by his own income position.

Treatment of Unrealized Capital Gain

In all cases—save the unusual one where the investor dies before selling his fund shares—the tax liability on unrealized appreciation in the value of the stock is only deferred. Ultimately it must be paid when the gain is realized through sale or redemption of the shares. Thus, at least for the bulk of the investors who will sell their shares during their lifetimes, unrealized appreciation can be handled in the same manner as realized appreciation; *i.e.,* unrealized capital gain can be reduced by the amount of the tax liabilty applicable to it when calculating total gain after tax for some specific period.

Selection of Tax Brackets

A major problem in calculating after-tax total gain is the selection of tax rates which will be applicable to the bulk of fund investors. However, a recent study by the National Association of Investment Companies provides some valuable information about fund shareholders.[5] This study indicates that most mutual fund shareholders are not wealthy people. Over 58% of them have incomes of under $7,500 per year, and over 72% of them have incomes of under $10,000 per year. Thus, most mutual fund shareholders have incomes, after exemptions and deductions, which put them in the tax brackets between 20% and 30% inclusive. Since the bulk of these investors are married people with families, most of them will be either in the 20% or 22% bracket, rather than in the 26% or 30% brackets.

Even though all fund shareholders are not in one specific bracket, it is not necessary to compute the total gain after tax for all of the possible tax brackets in order to present the investor with a realistic picture of his net gain. Capital gains become only slightly more attractive as the investor moves from one tax bracket to another, especially when this movement occurs in the lower tax brackets. Furthermore, when funds with similar investment objectives (*e.g.,* growth funds, or income funds) are being compared with each other, the range of proportions of total gain achieved via capital gains is not very great. For example, in a rising market all similar funds will achieve some gain through ordinary dividend income, and some gain through appreciation in the value of the shares they hold.

During a given period of time, one fund may achieve, say, 60% of its total gain from ordinary income, while a similar fund achieves 50% of its gain from such a source. A survey of investment companies made by the authors indicates that the ordinary income vs. capital gain differences among similar funds is seldom greater than that cited in the example above. For this reason, the investor typically would have to move through quite a few tax brackets before the tax differential, *by itself,* would make one fund a significantly better investment than another fund with similar investment polices. Consequently, total gain after taxes need be computed for only a few tax brackets in order to present a picture which is reasonably representative of the disposable amounts shareholders would have received during a given period of time by investing in specific funds.

The 22% tax bracket is the one which most closely approximates the tax position of the bulk of investment company shareholders. Hence, formulas which assume this tax rate will provide information which is meaningful for the majority of people who use funds as investment vehicles. To enable investors who are in tax brackets above 22% to arrive at estimates of their own after-tax gain, results for the 50% tax bracket (which brings the capital gains tax rate up to the maximum 25%) might also be worked out. With a high and a low set of figures provided, rather accurate interpolations of intermediate results can be made.

There are also good reasons for including a tax-exempt position in formulas which measure investment company performance. Many investing institutions such as universities (endowment funds), and labor unions (pension funds), are exempt from taxes. Although these institutions account for a relatively small *portion* of the capital put into investment companies, they do supply a rather large *absolute amount* of capital, particularly for the open-end companies. In addition, some investment company shareholders, particularly those investors who are over 65 and retired, have sufficient exemptions and deductions to make their tax liabilities either very small or nonexistent. Thus, the results shown for the tax-exempt position can also serve as a base for interpolation.

Change in Tax Law

Some question might arise about the validity of applying current tax rates to the historical gains achieved by investment companies. Although it is true that changes have occurred in tax *rates* during the last few decades, no significant shifts have occurred in the *handling* of taxes on capital gains as opposed to the handling of taxes on ordinary income. So long as tax law changes do not create a substantially new differential between ordinary income and capital gains, after-tax total gain can be calculated by using current tax rates without causing significant changes in the ranking positions of the funds.

REINVESTMENT ASSUMPTIONS

A third major problem encountered in measuring performance deals with reinvestment assumptions. In the previous section mention was made of the fact that the reinvestment techniques used by the existing services tend to be misleading to the investor because they ignore taxes and thereby require *increased* investment, rather than just reinvestment. Although this is the most significant weakness introduced by reinvestment assumptions, several other aspects of the reinvestment problem might also be mentioned.

The inconsistency of the reinvestment assumptions made by some of the services is one of the aspects which warrants attention. For example, one widely used service calculates the performance of open-end companies assuming no reinvestment of distributions, and also assuming reinvestment of capital gain distributions only. At the same time, the method used by this service to measure the long-term performance of closed-end companies results in the effective reinvestment of *all* distributions. Logically, when reinvestment adjustments are made, they should be handled in the same way for both major classes of investment companies.

Incompleteness of Assumptions

A second aspect of the problem which deserves comment concerns the incompleteness of the assumptions made by some of the services which measure performance. The chief theoretical justification for assuming reinvestment of fund distributions stems from the fact that the companies pay out differing amounts at various times. To put the total gains received by investors in different funds on a strictly comparable basis, distributions are assumed to be reinvested (by the process of accepting additional shares in lieu of cash), so that all of the capital originally invested in the fund, plus all of that which is generated as income, is continually at work for the investor over a given period of time. However, the fact that strict comparability is obtained only when *all* distributions are assumed to be reinvested, is overlooked by those methods which include reinvestment adjustments *solely for realized capital gains*.

Thus, such reinvestment assumptions are incomplete ones. It is not unreasonable to show results based on partial reinvestment (*i.e.*, based on reinvestment of capital gain distributions only), provided however, that results are also shown based on complete reinvestment of distributions, whether ordinary income or realized appreciation.

It might also be noted that strict comparability is obtained only when reinvestment is assumed to be made at the time the distributions are actually paid out, rather than just at the end of the fund's fiscal year. Only one of the services includes the refinement of assuming reinvestment of ordinary income dividends on a quarterly basis (which in almost all cases is their actual periodicity), and reinvestment of realized capital gain distributions on an annual basis (which is when they are typically made).

One of the consequences of making reinvestment assumptions is that the results attained therefrom tend to be much better than those which have actually been achieved by the investor. Since few investors accept additional stock, in lieu of all the cash distribution to which they are entitled, the gain they actually receive typically is much less than that shown when reinvestment is assumed. Naturally, the longer the time period for which results are calculated, the greater becomes the "ballooning" effect introduced by the reinvestment of distributions. Furthermore, when taxes (and the purchasing charges levied by some funds on reinvested distributions) are not take into consideration, the results shown can be deceptive to the typical investor who does not appreciate the significance of the assumptions underlying their determination.

INTER-COMPANY COMPARISONS

A fourth major problem encountered in measuring performance is that involved in achieving comparabiilty of results for mutual and closed-end companies. One of the existing services does not even concern itself with the performance of closed-end companies, while another service uses different methods in measuring the performance of the two types of companies.

The arguments usually given for treating the two major classes of investment companies as different types of creatures are based largely on two facts: (1) mutual funds stand ready to sell or redeem their share at, or close to, net asset value, while closed-end company shares are traded in a market, and typically sell at prices below—but occasionally above—net asset value; and (2) many closed-end companies employ leverage by including fixed-return securities in their capital structure, whereas few of the mutual companies employ this device. The essence of these arguments then, is that the differences between mutual and closed-end companies are so great that comparisons of their performance are not valid. We do not dispute the fact that there are significant differences between mutual and closed-end companies. Nevertheless, we do believe that it is both feasible and reasonable to develop a method for comparing these companies which puts them on the same footing in terms of the results they have achieved for investors.

The importance of developing a method for comparing these two types of companies derives from the fact that such a method would enable the Analyst to become better prepared to judge whether the higher returns typically achieved on closed-end shares are sufficient to offset the disadvantages of greater volatility and lesser liquidability often associated with them. Although some investors certainly have greater need for preservation of principal, or for consistency of income than do others, almost every investor would agree that there is a point at which he would sacrifice a degree of safety of principal or income for greater total gain.

It might be worthwhile to ponder, for example, the reactions of the investors in a *good* balanced fund which achieved a total gain before taxes over the last two decades of about $2,750 on a $1,000 investment, when they learned that the investors in a *mediocre* diversified stock fund achieved a total gain of over $4,200 during the same period on the same original investment. It would be even more interesting to note their reactions when they learned that the balanced fund paid out less than $1,000 in investment income, and less than $1,700 in total distributions, while the stock fund paid out over $1,400 in investment income and almost $2,300 in total distributions.

If some of these investors felt (as they might, depending on their own circumstances) that the "safety" aspect of investing in a balanced fund was worth the sacrifice in total gain, it would then be interesting to learn whether the $7,830 *total gain* they would have received by investing in a *mediocre* closed-end fund would still leave them satisfied with the balanced fund's performance. The figures cited above are not hypothetical. In *Part Two* of this article, figures will be provided showing the results actually achieved by a number of mutual and closed-end companies.

TIME PERIODS

A fifth major problem encountered in comparing investment company performance stems from the fact that some specific period of time must be used. This problem is an important one because the results shown for the various companies—and thus the positions they attain in a ranking array—can vary substantially from period to period.

The most commonly used technique for selecting time periods is the "base year-to-end-year" method. It involves the choosing of two points in time which are typically 1, 5, 10, or 15 years apart. The method is simple to use and easy to understand, but it suffers from what might be called the "blinder effect;" *i.e.*, it shows performance during only one slice of time, and the shorter the period, the more important the base and terminal years become. In its pure form this method can misguide the unwary investor because it leads to the showing of results achieved between only two points in time, whereas when these points are moved (but the same time spread between them is maintained), the results shown, along with the relative positions of the funds, may change substantially.

Probably the most sophisticated time selection technique is the "same market level" method.[6] The concept behind it is relatively simple. Since the selection of a time period is always an arbitrary process to some extent, this method attempts to lead the Financial Analyst to the selection of time periods which tend to minimize the effects of factors other than management ability. The minimization of other factors is accomplished by comparing funds over periods in which the stock market has, in effect, been held constant.

To hold the stock market constant, points in time, when the market was virtually at the same level, must be found. An example, using the old Standard & Poor's 90-stock index, would be the 21-year period between Dec. 31, 1929 and Jan. 16, 1951. On these dates, respectively, the market closed at 170.3 and 170.4. The objections to this method are of a practical rather than theoretical nature. First of all, the research required to determine asset and distribution figures on inconvenient dates is a very time consuming process. Secondly, and even more importantly, the method does not permit continuing and up-to-date comparisons when the stock market persistently moves up to new all-time high levels over an extended period of time.

In *Part Two* we shall illustrate a method which permits continuing and current comparisons of performance, without relying upon the use of single base and terminal years.

EXTERNAL YARDSTICKS

A sixth major problem faced by the Analyst who wishes to compare the performances of various funds concerns the use of a meaningful external yardstick. Several different yardsticks have been used over the years for measuring performance, but every one of these has suffered repeated criticism. Yet the question remains: In the absence of an external yardstick, how is the investor to judge whether the results achieved by investment funds are worth the price paid for management?

If a stock index such as one of those computed by Dow-Jones or Standard & Poor's is viewed in its *unadjusted* form, the investor, of course, cannot use it to determine directly just how well the management of an investment company has performed.[7] *However, when a stock index is treated as a fixed trust which levies standard load charges and annual management fees, it can serve as a standard for evaluating the performances of the managed-type funds.*[8]

The objections always raised when a stock index is used as a standard for performance should not be apropos when the index is treated as a fixed trust. First of all, the objection that the typical investor lacks the resources to buy the stocks in an index is negated by the fact that an investment company could buy shares of all the stocks in an index such as the Dow-Jones Industrial Average, in exact proportion to the weight they carry, thereby making it possible for the investor to buy a proportionate share of the index.

Indeed, such a procedure would seem to be a reasonable one if it led to results for the investor which equalled or exceeded those he could have achieved by investing in fully managed investment funds. The basic question then is this: If an investment company which periodically makes changes in its portfolio holdings, cannot over the long-run surpass the performance of an investment company which merely holds the same stocks as are used in some index, is the existence of the former as a managed investment fund justified?

Another objection raised against the use of stock indexes as standards for performance is that these indexes do not maintain cash positions, while the funds do maintain some cash and cash equivalents in their portfolios. This objection is easily met when an index is viewed as a fixed trust, with appropriate charges levied against it, because a fixed trust needs virtually no cash balance. The only cash it needs (to meet clerks' salaries, postage expenses, office rent, etc.) would be supplied by the "management" or expenses fee deducted from the dividends received on the portfolio holdings. Since these dividends are received by the fund before they are disbursed to the shareholders, there would never be any need to put part of the capital supplied by investors into a cash reserve. If and when redemptions exceeded sales, securities could be sold from the portfolio to meet the cash drain. The prime reason the fully managed fund maintains a cash balance, in excess of that minimal amount needed to meet current expenses, is that management considers it advantageous to do so. The cash balance serves either as a hedge against an anticipated decline in security values, or as a reserve to be used in making purchases when an unexpected "buy" situation arises. Neither the hedging nor the reserve functions of a cash balance would be applicable in the case of a fixed trust.

SUMMARY: PART ONE

The foregoing discussion has concentrated on the problems encountered in measuring investment company performance. It has emphasized the fact that although a number of services now publish information about the performance of investment companies, the methods used by these services have defects which detract from their usefulness to the investor and the Financial Analyst. It has also pointed out that the results developed by use of the various methods often are not only difficult for the average investor to interpret, but that in some instances these results tend to be misleading. In addition, the discussion pointed to some of the options available to the Analyst who wishes to develop a method of his own for evaluating investment company performance.

In this sense, *Part One* serves as the foundation for *Part Two,* which will follow in the March-April 1961 issue of *The Financial Analysts Journal.* In *Part Two* the method for measuring performance, which we have developed, will be presented. The results obtained by applying this method to a number of the larger and better known funds (both mutual and closed-end) will be summarized. They will then be used in seeking an answer to the question: Do the performances of investment companies justify their charges?

APPENDIX

1. American Institute for Economic Research publishes an annual volume entitled, Investment Trusts and Funds. The authors of this publication vary.

American Research Council publishes an annual volume entitled, Your Buying Guide to Mutual Funds and Investment Companies, by Leo Barnes. This organization also publishes an annual volume entitled, Your Investments, by Leo Barnes, which contains a brief section on investment companies.

Investors Advisory Institute recently began publishing a volume entitled, Forbes Guide to Mutual Fund Profits. Although the title of this publication suggests that it pertains to mutual funds only, information is also included on closed-end companies.

Hugh Johnson publishes an annual volume entitled, Johnson's Investment Company Charts. The information included in this volume pertains only to mutual funds.

Moody's Investors Service publishes an annual volume entitled, Banks, Insurance, Real Estate and Investment Trusts. This volume contains a wealth of historical information on all funds, both mutual and closed-end.

Arthur Wiesenberger & Company publishes an annual volume entitled, Investment Companies, by Arthur Wiesenberger. These volumes contain charts and data on all of the nationally important funds, both mutual and closed-end, as well as background information on many of the lesser known funds.

In addition to the six major services listed above, many other services and periodicals publish data on, and information about, investment companies.

2. Moody's and Wiesenberger both use methods which completely ignore purchasing and closing charges. Johnson deducts the load charge from the initial gross investment, thereby arriving at an initial net asset value which serves

as the starting point on the graphs he publishes. However, he also provides bar charts showing liquidating values after certain periods of time. The results shown by these bars are based on the amount of the initial gross investment, rather than the amount of the initial net asset value. The individual bars showing the results achieved by different companies are set alongside each other, providing the reader with his only direct means of comparing fund performances. Thus, effectively, Johnson's method ignores purchasing and closing charges.

3. Most funds provide a schedule of reduced sales charges on investments of $10,000 (in some cases $5,000) or more made within a period of 13 months. However, few investors are in a position to put more than a couple of thousand dollars into a fund over a 13-month period. Thus, formulas which recognize load charges typically assume the basic (maximum) charge made by a fund, and have good justification for doing so. It might also be noted here that sales charges are usually quoted as a percentage of the initial investment or offering price, rather than as a percentage of the net asset value actually received by the investor. Naturally, the per cent of the initial investment represented by the sales charge is less than the per cent of the net asset value so represented. For example, a charge amounting to 8½% of the offering price is equivalent to 9.29% of the net asset value.

4. A trailblazer in the problem of dealing with taxes in measuring investment company performances was J. A. Close. He wrote an article entitled, "Investment Companies: Closed-end vs. Open-end" which appeared in the May 1951 issue of the Harvard Business Review. Close's method for handling the differential between ordinary income and capital gain tax rates, however, causes the number of dollars of capital gain to be increased to an equivalent number of dollars of ordinary income before taxes. Thus, instead of using tax factors to reduce the total gain achieved to that amount which could be spent by the investor, he increases the dollar weighting given to capital appreciation so that the results shown substantially overstate the gain actually received by the investor.

5. The Mutual Fund Shareholder, National Association of Investment Companies, New York, 1958.

6. The "same market level" concept was presented by George W. Moffitt in one of the classical articles on the measurement of investment company performance. His article, "Management Achievement of Open-End Investment Companies" appeared in the April 1952 issue of the Journal of Business of the University of Chicago. Moffitt's article also contains an excellent critique of the methods used by various authorities in measuring performance.

7. The arguments against using a stock market index as a standard for evaluating investment company performance are presented by John B. Armstrong in his article, "The Case for Mutual Fund Management" appearing in the May-June 1960 issue of The Financial Analysts Journal.

8. The January-February 1960 issue of The Financial Analysts Journal contains an article entitled, "The Case for an Unmanaged Investment Company," by Edward Renshaw and Paul Feldstein. In their concluding remarks these authors state: "The evidence . . . supports the view that the average investor in investment companies would be better off if a representative market average were followed." (p. 45) Although their conclusion may be a valid one, the authors fail to justify it with a quantitative analysis based on the realities which must be faced in the investment world; e.g., even an unmanaged fund must pay commissions on the stock bought for its portfolio, and it must levy some kind of annual fee to cover its operating costs.

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WHAT PRICE MATURITY?

by Russell C. Carlson

SINCE THE "ACCORD" between the Federal Reserve and the Treasury Department was declared in 1951, interest rates and, therefore, prices of fixed income securities have fluctuated sharply. While the secular trend in bond prices has been downward since 1946, impressive but brief price advances have occurred. As a consequence, the management of a fixed income portfolio has become a hazardous business, with timing shifts in the maturity distribution of an account taking on increasing importance.

Not only have absolute changes in prices of bonds been severe but, more significantly, relative price changes between securities of different maturities have been even more volatile. The standard bond basis book demonstrates the affect of maturity on the price action of a bond. The axiomatic conclusion drawn from this investment fundamental is that the longer the bond the wider the price change is likely to be when compared with shorter term securities. The assumption implied is that for an *equal change in yield* longer term securities will register sharper price changes than shorter bonds.

In reality, however, we find in the market place that yields do not change equally among various term obligations. On the contrary, the shape of yield curves in periods of easy money has tended to look quite different than yield curves in a tight money market. That this phenomenon exists—or more precisely, has existed—there can be little doubt. Examine the June 1953 U. S. Government market yield curve relative to the curve emblematic of the 1954 easy money period. (*Chart I*)

Similarly, inspection of the yield curves for the 1957-1958 periods also point up the fact that 10-year obligations have moved over a wider range than longer term securities. (*Chart II*)

Expressed in price changes the shifts in value of intermediate and longer maturities highlight the practical aspects of this bond market characteristic. It might be well to examine more closely what did occur in the U. S. Government bond market since 1953.

I. RELATIVE ACTION IN PAST BULL MARKETS

(a) *June* 1953 - *July* 1954

The government bond market hit its low in early June 1953. For the next 13 months the market advanced rapidly which, as the aforementioned yield curve shows, resulted in a sharper yield change in 10-year obligations than in long term bonds. In fact, from June '53 to July '54 governments maturing in 10 years decreased in yield by about 1% while, at the same time, the long term 3¼% of '83-78 declined by about ⅝'s of 1%. *Chart III* shows the monthly cumulative price changes in 10 and 30-year government bonds from the lows of the '53 market to the '54 peaks. It is interesting to note that for the eight-month period, from June 1953 to February 1954, 10-year obligations advanced nearly as fast as true long-term securities. Putting it in another way, the investor did as well for the first eight points advance in that bull market as he would have done if he were committed to the 30-year 3¼'s. Subsequently, the longer bond advanced more

Chart I

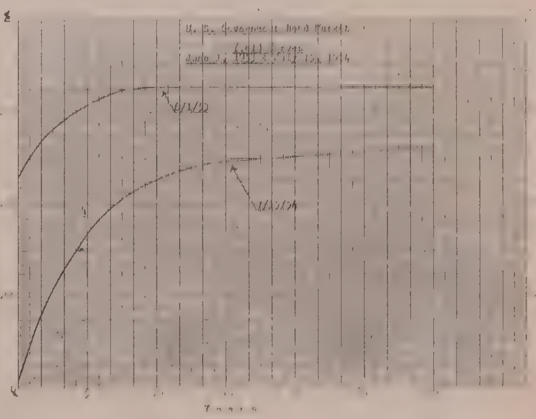
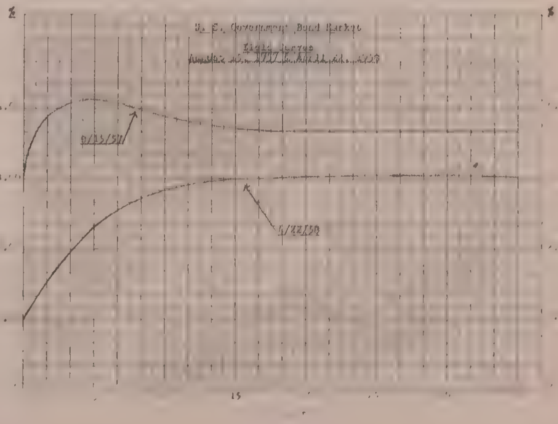


Chart II



Russell C. Carlson, assistant vice president of the Onondaga County Savings Bank, Syracuse, N. Y., is in charge of his bank's investment portfolio. Mr. Carlson was formerly with Guaranty Trust Co. of New York, and holds a master's degree in business administraion, corporate finance, from New York University.

Chart III

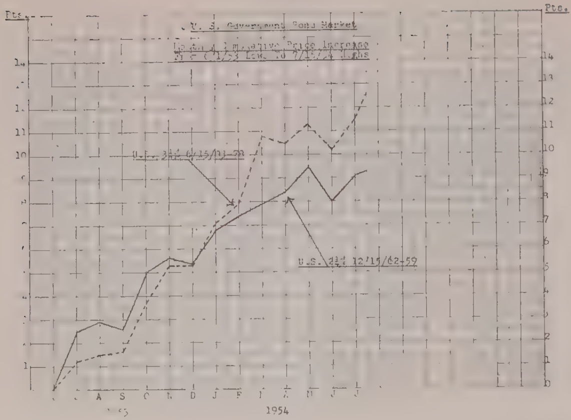
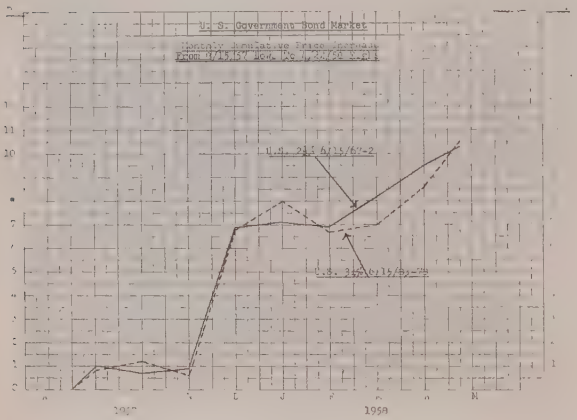


Chart IV



rapidly than the shorter bond but not until eight months of the general advance had transpired.

(b) *August* 1957 - *April* 1958

In this case the changes in yield and, therefore, prices were even more dramatic. From August 1957 to late April 1958 the seasoned 3¼% bonds due '83-78 advanced a little over 10 points. Surprisingly the 15-year shorter 2½'s of 6/15/67-2 did as well as the longer bond during this rise in bond prices. Once again, the facts indicate that conservative extension of maturity found the investor with as much price appreciation potential as he might have had in a long term obligation. Examine *Chart IV* which gives a month-by-month change in the prices of these securities during this advancing market.

II. RELATIVE ACTION IN PAST BEAR MARKETS

(a) *July* 1954 - *August* 1957

During this three-year period yields increased sharply with the bulk of this rise occurring in late 1956 and 1957. From the highs to the lows, 10-year bonds were off over 12 points while the 3¼'s of '83-78 dropped 18⅝ points. At first glance the investor might conclude that the shorter term bonds provided six points more protection in the declining market than the long-term security. While this is true in an absolute sense, only relatively late in this bear market did the short terms tend to hold their price relative to longs. For example, looking at *Chart V,* which shows the monthly cumulative price declines in intermediate and long-term bonds from July 1954, it will be noted that for the first six points of decline in the market the action of the 2½'s of '67-2 and 3¼'s of '83-78 was roughly comparable. As a matter of fact, as late as July 1956 the longer term bond was off about seven points while the 10-year obligation had dropped nearly six points. In other words, the shorter term obligations held no real price resistance relative to longs throughout much of that bear market.

(b) *April* 1958 - *January* 1960

In this declining market for fixed income securities long term 3's of '95, in less than two years, lost, in market value, over 19 points. Over the same period of time 10-year 2½% 6/15/69-4 dropped about 16 points. *Chart VI* traces the monthly price action of these bonds. As the chart indicates, for the first 10 points of this decline, which was reached in November 1958, the price action of both bonds was broadly similar. As a matter of fact, in August and September of 1959 the long-term bond was off only about a point more than the shorter security despite the fact that by this time the market had dropped about 15 points.

III. FACTORS INFLUENCING THIS MARKET ACTION

The facts support the notion that in bear markets intermediate term securities offer little price protection relative to true long-term bonds. Conversely, in rising markets nearly as much price appreciation has occurred in these shorter securities as in bonds with a longer maturity. While the facts in the market place support this general observation, can the factors at work that might account for this action be identified?

The composition of the assets of commercial banks tend to ebb and flow with changes in the level of business activity. When loan demands increase, borrowers may be accommodated by the conversion of U. S. Government securities to loanable funds. Conversely, dur-

Chart V

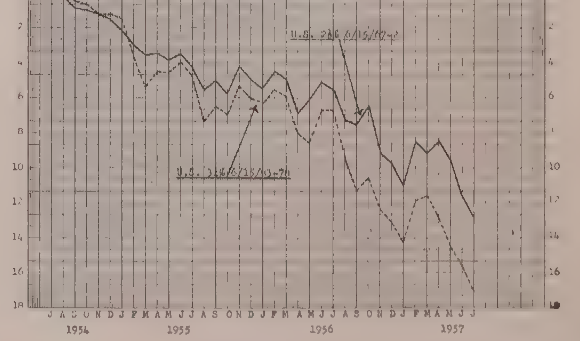


Chart VI

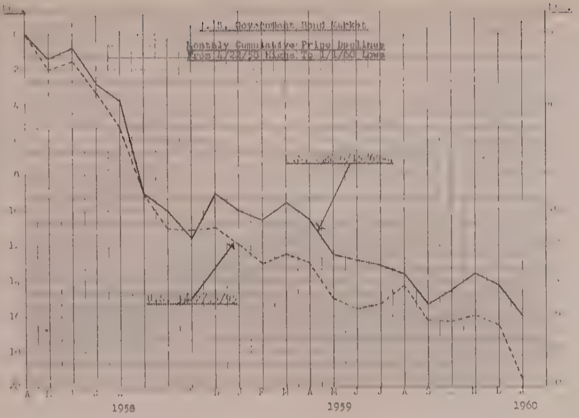
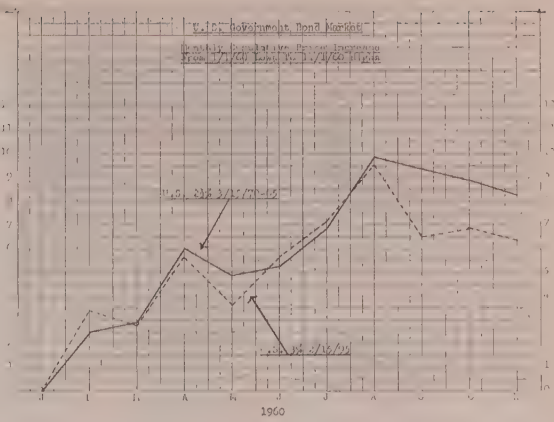


Chart VII



ing slack periods in the economy, loans are repaid and the proceeds find their way back to the bond markets. This periodic shifting of assets of commercial banks, in tune with changing demands for credit, appears to be one factor influencing the relative market changes outlined above.

As a general rule, most commercial banks do not commit a major portion of their funds to securities maturing in more than 10 years. During periods when credit goes begging, interest rates are low, and the shape of the yield curve "justifies" a maturity extension—the desire to maintain earnings is strong. Consequently, many commercial banks reach for income by acquiring the longest government bond it is their policy to own.

As signs of renewed credit demands by business develop these securities are then gradually liquidated to provide loanable funds to meet the credit needs of business. In other words, it appears that the disproportionate yield and price changes noticed may be a function of commercial bank buying and selling habits.

Other factors also work to influence this relationship, such as the affect of the 4¼% interest rate limitation as well as changes in the supply of long term governments. In connection with the latter point the recent case of advance refunding which resulted in an exchange of intermediate term securities for long term bonds undoubtedly has an affect in this context. However, this is a relatively new development which each investor must evaluate for himself.

IV. PORTFOLIO IMPLICATIONS AND CURRENT MARKET DEVELOPMENTS

Admittedly, this relative price action in the U. S. Government bond market has not gone by unnoticed by professional investment managers. Yet the implications of these market characteristics give one pause in the construction of an appropriate investment policy for fixed income portfolios. Can an investor employ these characteristics to his advantage? Are these conditions likely to be found in future markets?

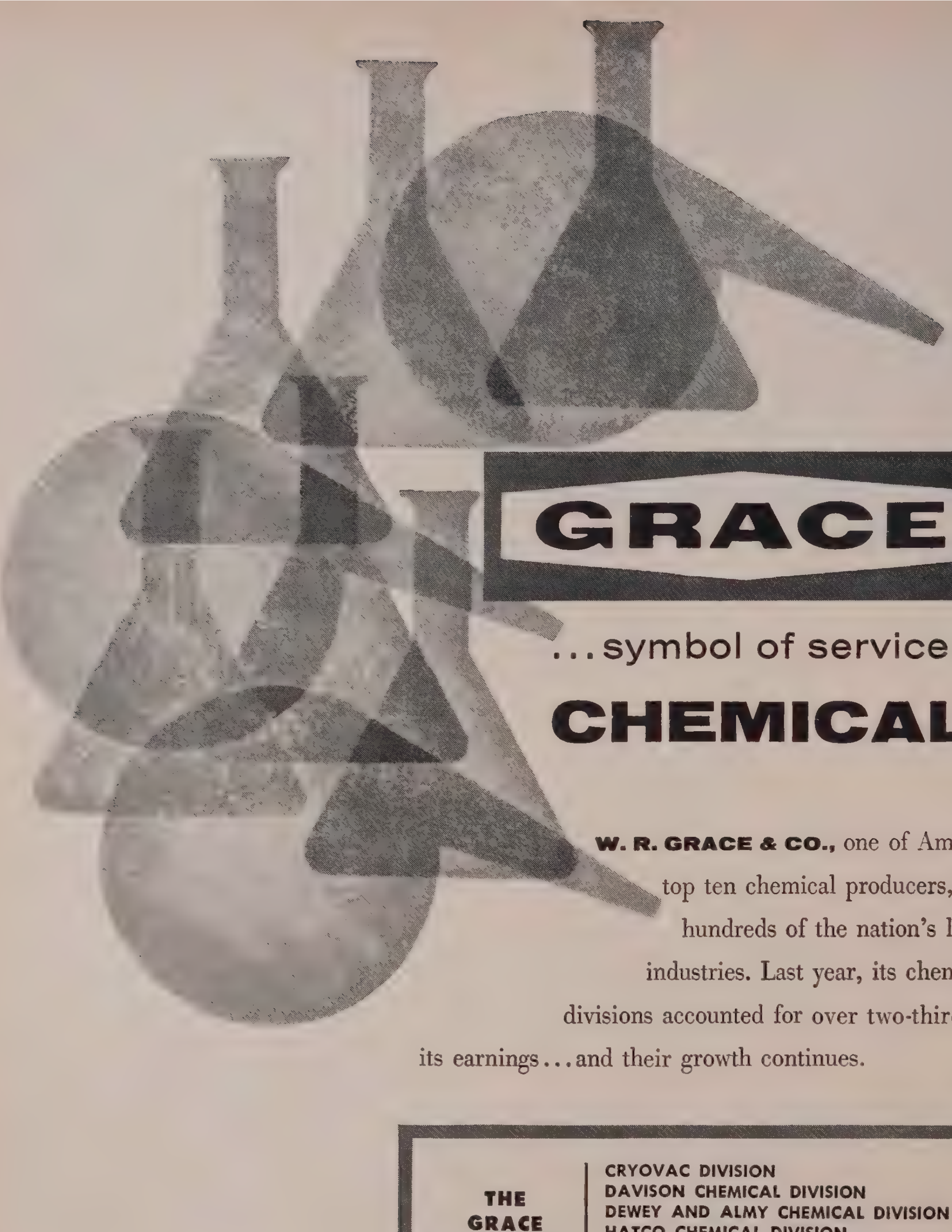
It is a fact that yield changes in intermediate term bonds in recent years have fluctuated more widely than they have in long term bonds. Assuming the bond market were to fluctuate in the future, it seems likely that this market phenomenon might well continue to be with us. If it were believed that interest rates were high, prices low, and a change in trend to be probable in the near future, the acquisition of depressed intermediates would seem to be the logical avenue for an extension of maturity. Certainly, the judgment or timing as to market trends might be wrong, but, if the portfolio could support some lengthening, the error might not be so serious. More importantly, this modest extension could provide the account with nearly as much price appreciation potential, for a time, as might be obtainable in truly long term bonds.

Assuming the bull market in bonds continued, the intermediates could again sell on a basis relative to long terms where their price exposure in a declining market, is as great as it is for the more distant maturities. In this event, the investor either (a) should switch to long term securities; (b) begin to hedge and shorten to 3-5 year paper; or (c) a combination of both. Assuming markets continued to fluctuate, it would seem prudent to avoid intermediates relative to longs in periods of low money rates. Conversely, the conservative course in tight money eras of modestly extending to intermediates may be almost as aggressive in price appreciation as is the acquisition of long term bonds.

Up to the present time, 1960 could well be described as a bull market for fixed income securities. Since early January of last year 10-year Governments have advanced nearly nine points while 30-year bonds are up about seven points. Running true to form, the apparently overly depressed intermediate range securities have shared in the price rise handsomely, as reflected in *Chart VII*.

In today's context we might ask if profit potentials in intermediate bonds, after a nine point rise, are equivalent to 30-year bonds. Or do we conclude that the risks of a falling market might now affect the holders of intermediates, for a time, in the same measure as owners of truly long maturities?

Clearly, each of us must be his own oracle when it comes to judging the future. However, a knowledge of the past can assist us in resolving these questions.



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A Forecast of British and American Prices During the Next 40 Years

by John A. Collins

THE GREAT RISE IN PRICES since the end of World War II has affected practically everybody and the problem is still with us. Here is my guess as to what the future holds for the next 40 years.

In my opinion the general course of prices between 1815 and 2000 will be as shown in the following index numbers of wholesale prices (1815 = 100). The United Kingdom index covers food and materials only and the U. S. index aims at covering all commodities.

Long term trend		U.K.	U.S.A.
		(1815 = 100)	
Fall in prices	1815	100	100
	1895 — low point	35	40
Rise in prices	1946	100	100
	1960	190	152
Stability	1962 — high point	202	161
	1965	202	161
Fall in prices	1970	192	152
	2000 (assuming no major wars)	140	110

Sources for 1815-1960 indexes. U. K. — "Statist" (Sauerbeck).
U. S. A. — Bureau of Labor.

The long term trends are roughly the same in both countries. Prices fell at the rate of 1½% p.a. between 1815 and 1895, and rose at the rate of 2% p.a. between 1895 and 1946 and at 3%-5% p.a. between 1946 and 1960. I estimate they will rise a little (say 3% p.a.) during 1961-62, remain stable during 1963-65 and fall from then on at an average of about 1% p.a. until at least 2000.

Many reasons have been suggested as to why there are these long periods in which prices tend continuously to rise or fall. They are said to be due to the effects of major wars; changes in the supply of money; changes in the supply and demand position of primary products; alternations in technical development between periods of experiment and periods of full exploitation, and pressures to lower or raise wages. These factors have all had some influence in the past but none of them is sufficient to afford a complete explanation.

For example, wars do not explain the rise in prices during 1895-1913 and primary products alone do not account for the rise during 1946-58. There was no shortage in the supply of money to explain the fall in prices during 1870-95, nor can the fall be said to be due to the conditions of technical development as the capital output ratio appears to have been falling a little in the U. K. and rising a little in the U. S. A. during this period. Finally — as far as trade unions are concerned—in the period since 1946, wage pressures have sometimes followed and not preceded or caused rises in prices.

I believe the main reason why prices rise or fall for long periods lies in the *degree of competition* which exists in the economy. The other factors mentioned above (wars, credit creation, wage pressures, etc.) affect prices within the general framework determined by the degree of competition.

The degree of competition is the result of the working of many different forces but the general characteristic of a high degree of competition between producers is the existence of a dynamic economy; i.e., one that is constantly undergoing change as a result of new sources of supply, new demands, new products and/or new processes. In this connection competition between countries and between industries (for example between steel and concrete for certain construction purposes) is quite as important as competition between the different firms in any one industry. The economics textbooks define competition as a state requiring the existence of many small producers but in a dynamic economy this need not be so as big firms are as likely to reduce prices as small ones.

I think the main reason for the long period of falling prices between 1815 and 1895 was the existence of strong competition, both internationally and within countries. Competition ensured that the lower costs resulting from the new techniques of the industrial revolution were passed on in lower prices. Competition remained vigorous throughout this period as more and more countries began to industrialize and increase the supply of goods; as new products like steel came to compete with old ones like iron; as new methods of transport powered by steam and coal were extended to compete with older methods; and as many former restrictions on international trade tended to be reduced through the lowering of tariffs and the unification of small states into larger ones.

Competition Eased

Between 1895 and the 1950's the degree of competition lessened. This happened because international trade in manufactures did not grow

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John A. Collins, an economist in the head office of Aluminium Limited in Montreal, is a graduate of the University of London and holds a B.A. degree in history and a B.Sc. in economics. Mr. Collins states that the views presented here are personal and not necessarily those of Aluminium Limited.

during most of this period although production increased. Taking 1896-1900 as 100, the index of World manufacturing production in 1936-38 was about 340, but of World trade in manufactures only 190. Two World Wars and their aftermath (especially the period 1945-58) produced long periods when demand greatly exceeded supply and competition tended to be weak. Although there was much technical advance, new products did not attain a position during the bulk of this period where they competed more than relatively marginally with old products.

Despite the rise of oil for instance, coal still remained the dominant source of fuel in this period, steel the main structural material, and railways the main method of inland transport. Large-scale businesses came to replace farmers and small private businesses as the typical units of production and most workers came to join trade unions. In the U. S. for instance production increased four times between 1870 and 1900, and the number of manufacturing establishments doubled, but between 1900 and 1939, when production increased six times, the number of establishments increased by only 40%. In the U. K., trade union membership averaged less than one million between 1870 and 1900, but was two million by 1913 and five million by 1939. When competition is not strong it is much easier for employers and employees in large businesses to get together and raise both wages and prices than it is in smaller units, and this tendency in itself further reduced the degree of competition between 1895 and the 1950s.

Prices Due for a Change

Today, it seems to me we are nearing the time when the long-term upward trend of prices, that has been with us since 1895, reaches its high point and reverses direction, and a long period starts when prices will tend to decline. This change will take place because the degree of competition in the economy is now increasing rapidly and will go on increasing, for two reasons.

First, international trade in manufactures is now growing fast again, and its free flow is likely to increase. Taking 1936-38 as 100, world manufacturing production in 1959 was 210, and trade in manufactures 260. The European Common Market, as an exclusive group that might impede the growth of trade, is unlikely to survive. It is based mainly on rather ephemeral political conditions, and economically is likely to succumb to the pressures which are striving to create a low tariff association which will include Western Europe, North America and the Commonwealth. The industrialized countries of the world, other than the U. S. A., feel able, for the first time since 1913, to compete with each other and can now afford to be free traders. The U. S. A. is now too involved in international affairs to be able to re-erect a high tariff. It looks also as if Russia will participate in international trade appreciably, especially after 1965. Both her needs and her production potential are widening in the current seven-year plan as her demand for consumer goods expands and she extends into new fields, such as chemicals. Finally, I am assuming throughout that although China will eventually try to get her own back on the Western World, including Russia, there will be no more world wars in the 20th Century. In my opinion a major war between Russia and the United States is very improbable.

Secondly, greatly increased research and development is continually giving rise to new products and processes. Total U. S. expenditure on research was about $200 million in 1930; over $1,000 million in 1947; and it is now over $12,000 million yearly. In the U. K. expenditure quadrupled between 1930 and 1950 and has now risen to about £450 p.a. By 1970 this research may achieve a new technology of atomic power and synthetic and biochemistry — existing technology is far too complicated—and set in motion a long period of falling costs. The increased tempo of competition will see that these falling costs are translated into lower prices.

The new competition under this second head is not so much competition between firms within an industry (the competition of the text books), as competition between industries themselves. Much of this competition between industries has existed for some years, but it is only now that it is beginning to reach significant proportions. In all cases the new industry, or product, is fundamentally very different from the old. Some examples are given in the following paragraph.

Significance of Changes

In fuel, coal was until recently the dominant source of fuel and power in industrialized countries; now petroleum and natural gas are taking larger proportions. Oil now accounts for 25% of British energy consumption as compared with 6% in 1937; and in the U. S. A. its use is now over twice that of coal as compared with two-thirds that of coal in 1939. By 1970, thermonuclear power will probably be in the field. In transport, competition in industrialized countries between railways and motor vehicles is now becoming really severe. The railways' share of total freight transport services in the U. S. A. has fallen since 1940 from about 60% to just over 40%, and that of road vehicles has risen from about 15% to over 30%. In a few years' time aeroplanes, following the same course as that taken by railways in mid-19th century Britain, will probably be carrying large quantities of freight. In materials, concrete and plastics (and aluminium?) are tackling increasingly (and with more and more success) the pre-eminence of steel for structural and general commodity purposes. In both the U. K. and U. S. A. the production of plastics materials and of aluminium on a volumetric (not a weight) basis, taken together, is now about 30% of the production of finished steel, whereas it was a negligible proportion in the 1930's. In textiles, new man-made fibres are competing with the older natural ones.

In many respects a new and simpler technology may arise within the next few years, reducing the present high level of capital costs (which have risen more than other costs since 1945) and enabling, incidentally, many underdeveloped countries to begin expanding at long last at a rapid rate. Their development in itself will increase the degree of competition in the world.

There are strong political and economic forces working in the world today which tend to maintain and increase the rate of technological change and advances for years to come. Such forces include international political rivalries; the pressure of high-cost labor in both the rich and poor countries; the burning desire of all countries—especially the poor ones — to get rich quickly; a shortage of land and natural resources relative to population in many areas; and the high cost of building new transport facilities.

The fact that the new industries mentioned have tended to develop faster in the U. S. A. than elsewhere may be one reason why U. S. prices have not risen so fast as those of other countries in recent years, and it may mean that price stability and then falling prices come earlier in the U. S. A. than elsewhere. Other countries in the world are likely to follow the same general price pattern as that outlined above for the U. K. and U. S. A.; but in the case of some of these countries the degree of competition now existing seems to be less and their progress towards a fall in prices may be slower.

This new world of continuously vigorous competition and falling prices may not be established in the U. K. and U. S. A. until 1965-70. The degree of competition is unlikely to be strong enough to do more than roughly stabilize prices during 1963-65; and during 1961-62, spurred on by a period of high demand, prices are likely to continue to rise. During the next few years there will be ups and downs in activity (including probably a moderate recession in late 1961) but the great boom of 1939-56 is unlikely to be followed by a serious slump as were the booms of 1914-19 in 1920-21 and of the 1920's (in the U. S. A.) in 1929-30. A high average level of investment, based on technological advance and a high

Report from North American Aviation, Inc.

How a major "aircraft" manufacturer moved into electronics, space, nuclear power and rocket engines (and increased sales by more than 50% in 8 years)

In 1953, non-aircraft sales amounted to 15% of the total sales at North American Aviation. In 1960, just eight years later, non-aircraft sales had increased by $513,000,000—and now accounted for 63% of total sales. Total sales themselves increased by 51.8% during this period.

This changing sales picture reflects the diversification into the new Space Age fields that has been taking place at North American Aviation for more than a decade. This is a significant change in a company that was once best known only for its superior military aircraft.

The complete picture of North American's growth and diversification can be seen clearly in this chart:

Fiscal Year	Total Sales (in millions)	Aircraft Sales (in millions)	(% of Total)	Non-Aircraft (in millions)	(% of Total)
1953	$ 635	$ 542	85%	$ 93	15%
1954	646	542	84%	104	16%
1955	817	654	80%	163	20%
1956	914	625	68%	289	32%
1957	1,244	834	67%	410	33%
1958	904	571	63%	333	37%
1959	1,045	566	54%	479	46%
1960	964	358	37%	606	63%

A typical example of North American's diversification is in the field of guidance. More than fourteen years ago North American began exploring an entirely new guidance principle. The result of this advanced thinking was dramatically demonstrated when an NAA-built inertial navigation system guided the USS Nautilus beneath the North Pole. This kind of far-sighted planning led North American into an extensive diversification program.

While maintaining its leadership in advanced aircraft with the Mach 3 B-70 Valkyrie program, North American Aviation is today advancing the new technology in many fields: nuclear reactors, liquid and solid rocket engines, manned and unmanned flight in aerospace, metallurgy, computers and data processing, and electronics.

This sound diversification and growth picture is the result of extensive research and development in the many fields of the future where North American Aviation continues to push forward the frontiers of technology.

NORTH AMERICAN AVIATION

Divisions: Atomics International, Autonetics, Columbus, Los Angeles, Missile, Rocketdyne

At work in the fields of the future

level of research; the maintenance of international cooperation; Keynesian policies of tax reduction and deficit financing; and the existence of stabilizers, such as increased unemployment insurance, should enable the general level of activity to be maintained at a relatively high level.

Falling prices mean of course that the real value of any sum paid in wages or profits increases. Stable or falling prices do not necessarily mean however that the *money* rate of wages and profits need fall. This is because productivity, or the amount produced per head, is increasing all the time at a rate which has averaged 2% p.a. in the past, and may average 3% p.a. for long periods in the future. If in the future productivity increases faster than prices fall—which is very probable—the money rate of wages and profits will increase by the difference between the two rates.

As far as wage pressures are concerned, the general tempo I have assumed in coming years of increased competition and falling prices, should reduce trade union pressure to raise money wages and result in much lower money wage increases than in the 1950's. It may be necessary to ensure, however, that individual unions do not absorb other unions, expand very considerably in size and become real monopolies. This may well be prevented by legislative action in the U. S. A. and by inter-union rivalry in the U. K. Some pressure for higher wages will continue and will act as a spur to technological advance.

It seems to me unlikely that there will be any great shift in the next few years in the proportion of total national income going into wages and salaries, and that going into profits. Since 1870 these proportions have remained fairly constant, and in the future both will continue to grow. There may be a small shift from wages to profits during 1960-65 to counteract a small shift from profits to wages, which took place in some of the post-war years, and to bring the proportions of wages and profits back to their "normal" levels.

America's Foreign Investment

Approximately $35 billion worth of commodities are produced yearly in foreign countries by American business firms, according to a Department of Commerce report. And handling this production are about 3,000,000 workers of whom less than one in a 100 comes from the U. S.

This report is based on the 1957 census of overseas investment and is brought up-to-date by new estimates. Book value of American-owned foreign affiliates is estimated, by Department Economists Frederick Cutler and Samuel Pizer at $30 billion, as of 1959.

And as might be surmised, more than one-third of America's total foreign investment is in Canada. A slightly smaller proportion is in Latin America, and about $5 billion is in Europe—the area of the most rapid expansion.

Leading all other investments is petroleum which, the report states, accounts for $10 billion. Sales of all foreign affiliates is estimated to have risen 15% from 1957 to 1959.

P. Lorillard Company

DIVIDEND NOTICE

Dividend of $1.75 per share on the Preferred Stock of P. Lorillard Company, which otherwise would be payable on the first business day in January, 1961, by way of anticipation has been declared payable December 19, 1960, to stockholders of record at the close of business December 1, 1960. A regular quarterly dividend of $.55 per share on the outstanding Common Stock of P. Lorillard Company has been declared payable December 19, 1960, to stockholders of record at the close of business December 1, 1960. Checks will be mailed.

New York, November 16 1960. G. O. DAVIES, *Treasurer*

FIRST WITH THE FINEST CIGARETTES—THROUGH LORILLARD RESEARCH

1760 P. Lorillard 200th Anniversary 1960

TWO HUNDRED YEARS OF TOBACCO EXPERIENCE

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King Size
EMBASSY
King Size

Smoking Tobaccos
BRIGGS
UNION LEADER
FRIENDS
INDIA HOUSE

Little Cigars
BETWEEN THE ACTS
MADISON

Chewing Tobaccos
BEECH-NUT
BAGPIPE
HAVANA BLOSSOM

Turkish Cigarettes
MURAD
HELMAR

ALLEGHENY LUDLUM
STEEL CORPORATION
PITTSBURGH, PENNA.

At a meeting of the Board of Directors of Allegheny Ludlum Steel Corporation held today, November 18, 1960, a dividend of fifty cents (50c) per share was declared on the Common Stock of the Corporation, payable December 20, 1960, to shareholders of record at the close of business on December 2, 1960.

S. A. McCASKEY, JR.
Secretary

Federation's 14th Annual Convention Plans

Financial Analysts from all parts of the United States and Canada are scheduled to converge on Richmond late in April, together with top industrial executives from many leading corporations, for the Fourteenth Annual Convention of the National Federation of Financial Analysts Societies.

Executive Committee, directors, and past presidents will attend several meetings on Saturday and Sunday, April 29 and 30. For members in general the convention begins on Monday, May 1, when Joseph A. Jennings, executive vice president of the Federation and general convention chairman, will welcome the Analysts, and present the first speaker.

Through Wednesday evening, May 3, Analysts will be offered a comprehensive and diversified program of addresses, forums, management conferences, field trips, and other activities. The electives and options built into the program cater to a wide variety of interests.

In addition to the substantial fare of the business program, the attractions of the region and the season promise to bring a capacity crowd to the Richmond Convention, the Federation's first in the South.

A notable coincidence is that the convention takes place in the capital of the Confederacy during the centennial year of the Civil War. Two-thirds of the Civil War was fought on Virginia soil—a great deal of it in the vicinity of Richmond.

Another timely note of special interest is that the convention will follow Historic Garden Week in Virginia, an annual event which brings visitors from far and wide to see the homes and gardens of Old Virginia at a time when they are at their loveliest. Many privately owned showplaces are opened to the public once a year for this event.

Old Richmond itself is one of the nation's showplaces. Seat of Virginia's government since 1779, and capital of the Confederacy, Richmond was besieged by British troops under the traitor Benedict Arnold, and during four harrowing years it was the objective of two great armies during the Civil War. Here America's first coal was mined, first iron and brick made. Here was the scene of Patrick Henry's "liberty or death" oration and other significant events of America's history.

Nearby are Monticello, famous James River Plantations, Jamestown, and Williamsburg—Williamsburg itself an attraction which draws more than a million visitors a year, many from abroad.

The ladies' program includes tours of historic Richmond, Williamsburg, and three James River plantations.

Post-convention Richmond and Williamsburg tours for Analysts are scheduled tentatively for Thursday, May 4.

Modern Richmond, financial center of five states in the Fifth Federal Reserve District, is a thriving industrial and distribution city, with more than 400 manufacturing plants turning out products valued at more than $1 billion annually. Cigarette capital of the world, international headquarters of Reynolds Metal Company, site of one of the world's largest synthetic fiber plants, metropolitan Richmond is an exceptionally stable and well diversified area. Following tobacco, in employment rank, are chemical products, metals, paper, food, apparel and textiles, printing and publishing, furniture and wood products.

At the luncheon meeting, May 1, the convention will be welcomed by the Governor of Virginia, J. Lindsay Almond.

Industries which will be treated in the convention forums include:

Aluminum, Space and Missiles, Petroleum, Paper, Railroads, Electronic Controls and Data Processing, Coal, Tobacco, Chemicals, Insurance, and Textiles. Field trips include Newport News Shipbuilding & Dry Dock Company, the Langley Research Center of the National Aeronautics and Space Administration, Chesapeake & Ohio Railway facilities at Newport News, Norfolk & Western's Hampton Roads Terminal, Chesapeake Bay Bridge & Tunnel Authority, Union Bag-Camp Paper Corporation, Virginia Electric & Power Company, American Tobacco Company, Philip Morris Incorporated, Allied Chemical Corporation, West Virginia Pulp & Paper Company, Reynolds Metals Company, E. I. duPont de Nemours & Company, and Hercules Powder Company.

Each field trip will include the opportunity to meet and talk with top executives of the corporations, as well as a tour of the particular plant or facility in this area.

Participation of Industrialists

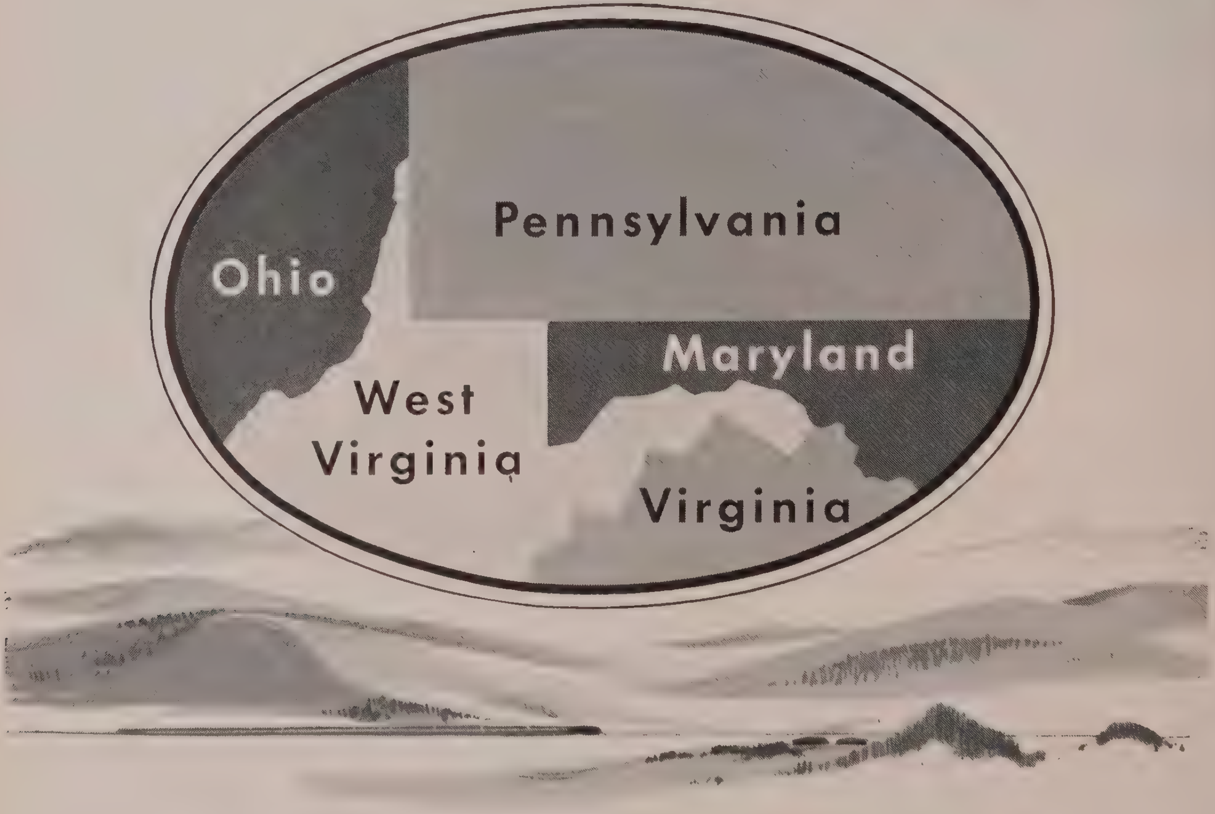
By early December many well-known industrialists already had been booked to participate in the program (as speakers, in forums, management conferences, field trips, etc.), including the following:

Christopher T. Chenery, chairman, Southern Natural Gas Company; Paul Endacott, president, Phillips Petroleum Company; J. R. Kennedy, president, Federal Paper Board Company, Inc.; G. Kenneth Crowell, executive vice president, Kimberly-Clark Corporation; W. Thomas Rice, president, Atlantic Coastline Railroad; Gilbert E. Jones, president, Data Processing Division, International Business Machines Corporation; William J. Carol, director of Product Planning, National Cash Register Company; George W.

(Continued on page 77)

West Penn Electric's new name is...

Allegheny Power SYSTEM, INC.



Allegheny Power System, Inc., is the new name of the five-state electric utility formerly known as The West Penn Electric Company. Originating half a century ago in western Pennsylvania, the system now extends from the Shenandoah section of Virginia to the top of Pennsylvania . . . from eastern Ohio across West Virginia into the Potomac Valley of Maryland.

Throughout this entire area, the name Allegheny appears many times. Rich in historical significance and once proposed as the name of the nation, Allegheny now identifies many natural features and is applied not only to place names but to the working names of trade and commerce. It is fitting that the electric utility system serving the homes and industry of the area should bear the same name.

As before, the system includes these major operating divisions:

Monongahela Power Company • The Potomac Edison Company
West Penn Power Company

Allegheny Power System, Inc., 50 Broad Street, New York 4, N.Y.

Electric Utility Regulation

by William B. Heberton

INVESTOR OWNED ELECTRIC UTILITIES operate under a franchise system which allows them monopolistic control over electric power distribution within the areas they serve. This economic characteristic is the genesis of the regulatory processes.

Municipal, state and federal administrative agencies have been created to substitute for the economic controls of free competition on the distribution of profits and services. These agencies or commissions establish uniform accounting systems, standards of service, rates to be charged for services rendered, and regulate virtually every other phase of a public utility's operation.

At the end of 1959 there were 44 states and the District of Columbia which had administrative agencies with jurisdiction over the electric light and power companies operating intrastate. Of the remaining six states, three have some form of municipal or local jurisdiction, Nebraska has no private electric utilities, and only two —Alaska and South Dakota—have no state, municipal or local agencies. The Federal Power Commission (FPC) has jurisdiction over those with no other control agencies and regulates all interstate transfer of power. Many of the problems of duplicating jurisdiction are overcome by companies which operate in more than one state through the use of independent operating subsidiaries, each of which is engaged in intrastate business only.

In the exercise of their duties, all of these regulatory agencies are subject to the legislative acts which created them. They are subject to judicial review by the courts. Therefore, some of the court interpretations set precedents which can be called upon to support and determine the rules and procedures under which these agencies must operate.

As early as 1898, the need for meeting the power requirements of a growing America through private industry was recognized when the Supreme Court of the United States set the basic regulatory attitude which is still predominant. In *Smyth v. Ames,* the Court established that a public service company is entitled to a fair return on the value of that property which it employs for the public convenience. In 1923 the Court stated in the *Bluefield Water Works* case:

> "A public utility is entitled to such rates as will permit it to earn a return on the value of its property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by the corresponding risks and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures."

The role of regulatory agencies in determining a return on investment, which is equitable to the consumer and will support the credit, not only of the debt but also the equity of the enterprise, is well established. However, the pressures of increasing money rates have caused demands for higher allowable rates of return and inflation has posed serious problems both in the determination of property values and the cost of common stock equity.

Through examination of the effectiveness of the regulatory processes in adapting to these stimuli, the forces of enlightened regulatory attitudes become apparent, and the potentials for investment in these securities can be better understood.

The common stockholder has not yet been adversely affected by declining returns on invested capital, and the growth of electric utility earnings per share can exceed the rate of the past decade. However, many utilities will add over 50% to their capitalization in the next five years. Therefore, recognition must be given to increasing costs of capital, labor and equipment if utility securities are to maintain their proportionate market evaluations in terms of those of other capital seekers.

Rate Base

Although the major emphasis of this study concerns itself with "allowable return", it is necessary to examine the methods used in determining the base on which return is to be produced, or the value of the investment required in order to conduct the business.

Through usage, it has been established that utility property be valued and considered as the rate base. Until World War II, this valuation of the rate base was considered to be the current value of the property determined by a competent engineering appraisal. However, in 1944 the historic *Hope Natural Gas* case largely freed the commissions from adherence to any rate base formula. In this case the Supreme Court upheld the use of the actual cost of utility plant in service less the accumulated depreciation thereon, plus an allowance for working capital as a fair rate base. Since then, there have developed four major methods of determining the value of investment as follows: The cost at which the property was first used for public utility purposes less the accumulated depreciation thereon or original cost; original cost trended for the change in price levels; the

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reproduction cost depreciated; and the prudent investment value.

The policies of the various state commissions in determining the rate base for an electric utility will constitute the basis for comparison of the returns allowed by each jurisdiction in this study.

Original Cost

It will suffice at this point to say that common practice is to record property on the books of account of electric utility companies at original cost in accordance with the uniform system of accounts as prescribed by the FPC. In addition to the cost of property most commissions using this method of valuation make some additional allowance for the liquid funds and other net assets of the business. Many commissions depend upon some predetermined formula, which usually approximates net working capital to establish this additional investment.

The advantage of the original cost method is its ease of computation. There is little need for estimates of value, as records of costs are available in most cases. However, many experts believe that the method puts too much emphasis on depreciation policy. For example, the reserves for depreciation as a percent of gross plant in major companies range from approximately 10% to 30%.

Another disadvantage stems from the fact that the application of rates of return, based solely on the computed costs of funds to an original cost rate base, results in an insufficient return to support the credit and attract new equity capital. A third disadvantage is that no credit is given for the increasing prices which must be paid to obtain capital equipment with the new money being raised. This factor of "attrition" has been recognized in some rate cases in jurisdictions which adhere to an original cost base.

The public service commission of Utah, in a rate case involving Mountain States Telephone & Telegraph Company dated Dec. 29, 1953, compared the average investment per telephone in existing plant with the cost of new plant per telephone being added currently. The results indicated that the new plant was costing $125 more per telephone than the old plant had cost. The commission made a specific allowance in the rate base, therefore, of an amount equal to $125 multiplied by the estimated increase in the number of telephones during one year beyond the midpoint of the test year.

Fair Value

The increasing costs of construction and the apparent inadequacies of original cost rate determination have led to the adoption of various methods for estimating the "fair value" of property used in a utility service. Estimates of fair value are usually made in one or a combination of three basic evaluation techniques.

Reproduction cost valuation attempts to determine fair value by estimating the replacement value of exactly similar assets. This has the advantage of realistically updating costs for current prices but does not make any allowances for advances in the "art," and is hard to evaluate properly. This method assumes that a company would replace each unit with an exactly similar unit at today's prices but, obviously, this would not be done. Advances in technology have changed the characteristics of the assets.

In order to account for this factor, the prudent investment cost or substitution evaluation method was attempted. This assumes replacement of assets with the best possible substitute then available. Here we can establish a good evaluation of worth at today's prices; but who is to make such judgment computations, and what is prudent? The method does not relate to plant actually in use and is, therefore, criticized as lying in the realm of conjecture.

Trended original cost has become the most widely used measure of "fair value," although both of the above methods are often used to support the findings for "fair value." This method uses the original cost of each asset as shown by the books, to which is applied a trending factor based on an index such as the Whitman-Hand Indexes of construction costs, the Federal Reserve Board's Index of consumer prices, or the McGraw-Hill and F. M. Dodge Corp. statistics in order to account for the change in worth resulting from the changing value of the dollar. This measure usually results in a fair estimate of value but, of course, has the same disadvantage of depending on judgment for the choice of the proper index.

WHAT THE STATES USE

Of the 45 regulatory agencies with jurisdiction over electric companies, as reported in Moody's Public Utility Manual for 1959, 20 employ original cost rate bases, 12 use trended original cost "fair value" estimates, one uses reproduction cost, three use prudent investment rate bases, and nine use various combinations of the above which are directed at obtaining some form of "fair value."

In spite of these announced policies, it should be pointed out that confusion exists as to what these terms actually mean even when prescribed by law. In a recent Michigan case, involving Consumers Power Company, the company referred to an Electric Transmission Act which requires consideration of "a reasonable return on the 'fair value' of all property used in the service." However, the Commission referred to the *Hope Natural Gas* case, which said " 'fair value' is the end product of the process of rate making not the starting point . . .," and determined the valuation to "consist of the cost of property when first devoted to public service plus a necessary amount for working capital."

Before ending this discussion of rate base, it should be pointed out that, for comparative purposes, the tables used in this study are classified as States using "original cost" determination and those using "fair value." Fair value in this case includes reproduction cost, prudent investment, trended original cost and combinations of those determinants, because these can all be considered methods of computation.

The rate of return to be allowed, once the rate base is established, is determined by the considered judgment of many factors including the cost of money, the return on investment in other industries having similar risks, the needs for capital and the attitude of the regulatory agencies toward the need for financial integrity of our investor-owned public utility companies.

Cost of Capital

One of the most commonly used of these factors is the cost of money, or the out-of-pocket expense required for the hire of capital. The Federal Power Commission on June 11, 1952 in *FPC v. Northern Natural Gas Co.* gave the controlling weight to the cost of capital in fixing the rate of return. The FPC's use of this cost principle was upheld by the U. S. Circuit Court of Appeals and was given tacit approval by the Supreme Court which refused to review the decision of the Circuit Court. Since that time, many state utility commissions have formally adopted the use of cost of money as a basis for developing allowable return and most make some use of this principle.

Since analysis of individual rate cases would yield little conclusive evidence of regulatory attitude toward "cost of money," a questionnaire was sent to 50 regulatory agencies. This was answered by one-half, or 25 of these bodies, and indicates the importance of cost of money in determining an allowable rate of return. In order to summarize, there is indicated in the following table the degree of consideration given cost of money as a measure of fair return under the major types of rate base determinations:

Cost of Money as a Determinant of Return

Degree of Consideration Given Cost of Money	Under Rate Base Determined by Original Cost	Fair Value	Total
Sole determinant	3	6	9
Considered a factor in judgment	10	4	14
Not a consideration	1	1	2
Total	14	11	25

This shows that most of the 25 states which answered considered "Cost of Money" an important factor in determining return, while only two gave it no consideration whatsoever. In this fact, I believe, lies the importance of studying the apparent effect of increasing costs of money on the rate of return.

As would be expected, many methods of computing these costs are available to the statistician and a great variation in results can be achieved. Usually some form of historical or actual cost computation is used in determining the cost of bonds and preferred stocks, and some combination of earnings price or dividend book value ratios is used to establish common equity cost. These values are then applied in proportion to their representation in total capitalization, or, if this is out of line, to some hypothetical capitalization in order to obtain the overall cost of money. This procedure is represented in the following table, using purely hypothetical cost and capitalization ratios:

	Estimated Cost	% of Total Capitalization	Cost of Money
Bonds	5%	50%	2.50%
Preferred Stock	5½	15	.825
Common Stock	10	35	3.50
Overall Cost			6.825%

Because, in reality, these costs and ratios are not so easily determined, it is necessary to discuss in further detail the methods of establishing the cost of the various segments of capital and their distribution in the capitalization.

Bonds and Preferred Stock

The fixed interest or dividend requirement can be considered the cost of bonds and preferred stock. Therefore, these determinations often start out by statistically establishing the actual cost of the debt obligations and fixed dividend stocks, including embedded costs of refunding, in relation to their par value or issue price. This appears fair in light of the fact that this capital is invested in the business at or near its par or stated value and the requirement for payment of the interest or dividend is continuing. In recognition of the present costs of fixed income financing, many commissions have adopted the use of current cost of financing to similarly rated companies. Another method is to determine average costs over representative periods in the recent past. These are usually determined by the use of one, three or five-year averages of the recognized statistical services' composites for similar grade bonds or preferred stocks. In addition, an allowance is included for the additional cost required to sell a new issue over those available in seasoned markets.

The need for recognition of these current costs becomes apparent when it is realized that one large eastern utility with an actual cost of debt money of about 3.2% was required to pay over 5% for funds recently obtained through the sale of first mortgage bonds.

The survey of utility commissions showed that, of the 20 agencies that used cost of money computations in determining return and gave sufficient answers to this question in order to allow classification, 17 used actual or historical cost and three used some combination method for the determination of cost of debt and preferred stock money, giving some recognition to higher present costs. Those that adhere to actual cost have attempted to allow for the problem of higher present costs by including, on a pro forma basis, those securities which are to be issued within a reasonable time. Of course, the interest or dividend assumed for these new issues is that prevailing on similar new issues at the time of rate determination.

Another question can be raised with respect to borrowed funds as to whether or not the cost of this capital should include an incremental factor for recovering the principal amount of the funds borrowed. Of course, in theory the depreciation reserve will supply funds necessary to meet the requirements of principal repayment. However, the question still remains as to whether the depreciation allowance, which is based on the life expectancy of an asset, will be sufficient to meet the principal requirements of a bond issue whose maturity may differ substantially from the life of the asset it financed. The complexity of this problem and the impossible task of accounting for capital dollars in a way which would give effect to maturity dates makes an approach of this sort unreasonable. Determination of a method of allocating those debt dollars which are not used to finance a depreciable asset so that proper allowance in the rate of return could be made to recoup this capital is probably out of the question. However, this should be kept in mind as a reason which supports an additional allowance to the bare bones cost of money in a rate of return determination.

Common Stock

There is no general agreement on how to determine the actual cost of equity capital, because there is no fixed or contractual rate as there is in the case of debt and preferred stock. The arguments on this point range from those who say that common stock has no cost to those who believe the cost should be calculated as the earnings available for common dividends in percent of book value of the common stock. Both of these extremes have their merit, but the practical answer must lie somewhere in between.

Generally, it is agreed that the cost of common equity should be higher than that of bonds and preferred stocks of the same company because of the greater risk involved. This is not to say that the dividend must be higher. As stated in the *Bluefield* case, "A public utility is entitled . . . to earn a return . . . equal to that generally being made . . . in other business undertakings which are attended by the corresponding risks and uncertainties." This thinking has led to the search for comparative common equity costs; but, obviously, it is difficult to find a good comparison. No two enterprises are the same and results dependent upon another endeavor, no matter how well conceived, are not conclusive. The ability to attract capital in each case must be determined by the success of the subject company in the past, the relative quality of all its securities, and an analysis of its trends in recent years.

Dividend requirements in themselves cannot be called on to determine a reasonable rate of return. Such payments represent a prerogative or decision of management and do not represent the full return to an equity holder who shares in retained earnings. Neither can the commission be held responsible to fix a rate of return which will guarantee the continued payment of dividends. Although the recent history of dividend payments by electric utilities has made that comment academic, the experiences of railroads show that a reluctance to recognize change can force reduction of dividends.

Usually the cost of common equity is held to be some combination of the earnings, dividend and price relationships and includes a large element of judgment. The most common method uses the ratio of the earnings available for payment of common stock dividends to the market price of the stock. However, this is often criticized as "allowing regulation by the stock market." In addition, price earnings relationships fail to recognize the three following factors:

1. Common stock prices anticipate a continued growth in earnings.
2. The price may be inflated by the expectation of rate increases.
3. Retained earnings which have been reinvested cost the corporate entity as much as any other common equity capital.

These factors have all been considered in the past. However, no adequate method of making allowance for the first and third has been developed. The problem of anticipation of rate increases can be eliminated by using the ratios of representative similar companies which are not apparently in a position to request increases. As for the expectation of higher future earnings, the Pennsylvania Public Utility Commission in a case involving the Peoples Natural Gas Company, decided Feb. 26, 1957, refused to give this factor due weight in a determination of cost of common equity because they felt that any determination of this sort would lie in the realm of conjecture. The commission stated that the current earnings price ratio recognized whatever growth was being permitted by managerial discretion. Therefore, this remains a point for which commissions have seen fit to add a judgment allowance to the "bare bones" or computed cost of money in those jurisdictions which allow such judgments.

The third factor, the cost of retained earnings, has received a lot of attention over the years; but no satisfactory method of allowing for it has been devised. The market price assumes a payment for the earnings power resulting from earnings previously retained in the business. It is also assumed that this surplus has been built up with no apparent cost to the corporation so long as the owner does not withdraw his share. However, in a true determination of cost, it should be assumed that this capital is being withdrawn by the owner and is being replaced by the new owners.

The accompanying table, *Effect of Full Payout of Earnings on Growth,* shows the effect of assuming a full payout of earnings on two companies operating in areas with different growth characteristics. In both cases the growth of earnings, and thus dividends, is substantially reduced by the need for additional common stock caused by the full payout of earnings. For this reason it appears, and here we can only make an assumption, that the multiple of earnings would be somewhat reduced due to the lower growth rate. Of course, the dividend would afford a substantially higher yield to the investor and, it might be argued, would increase the valuation of earnings. However, this factor is not considered here because at some point in time the growth in earnings and dividends would overcome this yield

EFFECT OF FULL PAYOUT OF EARNINGS ON GROWTH

Public Service Electric and Gas Company

	Additional Common Stock — Reported Retained Earnings (1)	Shares (2)	Earned per Share (3)	Market Price Year End (4)	Price ÷ Earnings Ratio (5) (Col. 4 ÷ 3)	Additional Shares Cumulative (6) (From Col. 11)	Adjusted Shares (7) (Col. 2 + 6)	Reported Earnings for Common (8)	Adjusted Earnings Per Share (9) (Col. 8 ÷ 7)	Assumed Price (10) (Col. 9 × 5)	Additional Shares Required (11) (Col. 1 ÷ 10)
1955	$6,029	9,865*	$2.26	33.6	14.9	----	9,865	22,306	2.26	33.6	185
1956	5,418	9,965	2.34	31.4	13.4	185	10,150	23,356	2.30	30.8	176
1957	5,795	11,836	2.29	29.6	12.9	361	12,197	27,101	2.22	28.7	210
1958	5,632	12,209	2.29	38.4	17.0	571	12,780	27,608	2.16	36.8	153
1959	8,060	12,954	2.42	37.5	15.5	724	13,678	31,378	2.29	35.5	227
Increase 1955-1959			7%						1%		

Gulf States Utilities Company

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1955	$3,428	8,444	$1.08	18.4	17.0	----	8,444	9,107	1.08	18.4	186
1956	1,884	8,644	1.10	17.7	16.1	186	8,830	9,541	1.08	17.4	108
1957	3,112	9,044	1.13	20.2	17.9	294	9,338	10,226	1.10	19.7	158
1958	4,112	9,524	1.29	27.7	21.5	452	9,976	12,241	1.23	26.4	156
1959	3,250	10,024	1.36	30.2	22.2	608	10,632	13,657	1.28	28.5	114
Increase 1955-1959			26%						18%		

*Average

differential to the advantage of those companies retaining earnings. Therefore, this is true only as a company makes the change from partial payout and is not basic to the analysis.

In spite of these apparent inaccuracies, the ease of computation and acceptance of additional allowances to account for the vicissitudes of the market price have made the earnings price ratio the most frequently accepted measure of common equity cost.

Once established, these costs of debt, preferred and common equity, are applied to the capitalization ratios to determine the overall cost of money. Capitalization ratios are usually based on book values rather than market value which would seem most appropriate at first glance. The FPC has criticized the use of market ratios by noting that such an application would have the effect of departing from an investment or original cost rate base and substituting, in part, a fair value base according to the proportion of common stock to other capital.

In fair value states, it is felt that a procedure using market ratios would give double effect to inflation. However, it is recognized that some other determinant than book capitalization might be applicable. The problem then is to allow for the inflationary effect on capital as well as plant. Therefore, we must search for a capitalization value which best represents the present value of capital invested in the fair value plant. For this reason, it would seem appropriate to use, in those states that recognize a fair value rate base, a capitalization equal to that rate base. This would include debt and preferred stock at the actual par or stated value because inflation cannot increase the number of dollars of fixed income investment. The common equity, however, would represent the remainder of this valuation, or the fair value determination of rate base less the par or stated value of the fixed income investment.

In those states using original cost determination, it seems correct to use the book or actual capitalization since, in this case, it corresponds with value. These states should endeavor to recognize the effects of inflation by judgment allowances in the rate of return.

Accelerated Amortization

Another problem in determining cost of capital results from capital being made available under one of the government's programs for fast depreciation or amortization. Without going into the specifics of these programs, it should be pointed out that differences in accounting for them do exist and that they can substantially affect both the rate base and the cost of money.

Regulatory authorities have chosen to account for the benefits of liberalized depreciation and accelerated amortization in two ways. One group has allowed companies to include as an additional expense on their books the difference between the actual federal income tax paid and that which would have been paid had they not been able to increase depreciation under these programs. The other group has allowed only the actual taxes paid to be deducted as an expense. Since most regulatory authorities allow only normal straight line depreciation to be shown on the books, the result is to vary the amount of reported earnings depending upon the method chosen.

The first method in effect normalizes earnings by excluding the resulting benefit to earnings through an additional expense item called "Provision for Deferred Taxes on Income." Thus, during the period that depreciation for tax purposes exceeds that shown on the books, this account is debited and a balance sheet reserve account, "Accumulated Deferred Taxes on Income," is credited. This, then, has the effect of allowing the utility use of the resulting deferred capital by increasing the rate base or property value without a corresponding charge for these funds. When the depreciation for tax purposes on a particular asset becomes less than that shown in the books, the accumulated reserve is then charged and the Deferred Taxes on Income is credited. At that point then, it will become necessary to replace this capital with other funds bearing interest or dividends. Thus, under this form of accounting, a utility is allowed the free use of these funds for the period of the deferral.

The other method, which charges only actual taxes paid as an expense, in effect "flows through" this tax deferral to earnings. This, of course, increases the apparent return during those years in which tax depreciation exceeds book depreciation and reduces it when the tax payments increase above the normal level. In adopting this second method, many of the commissions have failed to increase the allowable return to account for the increase in earnings resulting from the flow through of deferred taxes. Therefore, the benefits of the liberalized depreciation program are being passed through to the consumer in the form of lower rates. However, at such time as the tax depreciation no longer exceeds book depreciation, then the return will be decreased and rates would have to be increased. This difference of accounting stems from the commissions' opinion as to whether or not these deferred taxes will ever be paid since depreciation accruals for taxes will continue to exceed those shown on the books so long as new plant is constructed at a rate in excess of the depreciation accruals and retirements.

The problem, if flow through is used, stems from the interpretation given this capital by the commissions. If they regard this as a tax saving, they would then show an increased return and would be less likely to increase rates. If, on the other hand, they consider this a deferral of taxes, they would probably allow an increased return to account for its effect.

Because of the effect of the varying methods of accounting for liberalized depreciation, this study will show the return on average capital of various companies and distinguish as to what accounting is used when the companies use one of the liberalized depreciation methods. However, the return on capital measurements used in this study have been adjusted to reflect the effect of a normalizing charge in those states which require the flow through of these benefits. In this way these measures of return can be made most truly comparable.

In the determination of allowable return in those states which normalize tax deferrals, various approaches have been taken. Some commissions deduct the resulting reserve from the rate base, while some do not. Other commissions include the reserve as free capital in determining the cost of money. The results are the same whether the reserve is deducted from the rate base or reflected in the rate of return; but in those States which make no adjustments to rate base or return, the full benefit accrues to the company in the use of the capital.

Although these cost of money determinations may be statistically expedient for both the commissions and the courts, many jurisdictions have recognized the need for a realistic judgment factor over and above the "bare bones" cost of money to determine fair return.

The extreme reliance on informed judgment in rate of return was expressed recently by Alan S. Boyd of the Florida Railroad & Public Utility Commission, before the 71st annual convention of the National Association of Railroad and Utility Commissioners, when he noted that commissions might best use the original cost rate base because of its ease of computation and apply informed judgment to account for inflation and money rates in the determination of the rate of return.

At that same meeting, the retiring president, Matt L. McWhorter, noted that "We are all going to be faced with mounting pressure for recognition of the 'cost of money concept' in our rate making."

Thus, can be seen the counter forces at work in the methodology of determining fair return; but it should be noted that there is general agreement in the realization that inflationary effects are not going to disappear just because we ignore them.

The judgment factor in rate of return has taken many forms. Some commissions adjudge return by allowance of an additional margin over computed cost of money which they say is necessary to account for regulatory "lag," vagaries of the market place and other intangibles. Other agencies arrive at return by judgment, based on factors other than the cost of funds, such as return to similar businesses, the need for capital, and other intangibles. Often returns arrived at in this manner are well conceived because the comparative results of companies operating in areas which use a more sophisticated determination are available. However, the need for a realistic approach is recognized.

TIGHT MONEY AND INFLATION

The continuing pressures on money rates and inflation of material, wage and construction costs have put a two-way squeeze on electric utility companies who have generally been unable to increase prices charged for their services. Increasing demands have been met by higher construction costs requiring greater use of external financing that has become more expensive to obtain.

The secular trend of money rates has been up for some time and, in spite of periodic swings, can be expected to stay at levels somewhat above those prevailing during the depression, war and reconstruction period.

As the cost of debt increases, it reduces the margin available to flow through to the common stock. The following table illustrates the effect on the return available to common equity during a period of rising costs of debt and preferred stock when the allowable return is held constant.

Cost of Money With Constant Overall Return

Capitalization	%	Rate	Composite	Rate	Composite
Bonds	50%	3.50%	1.75%	5.00%	2.50%
Preferred Stock	15	4.25	.64	5.75	.86
Common Stock & Surplus	35	10.00	3.50	7.24	2.53
Total	100%		5.89%		5.89%

It will be noted that the rate of return on the common stock and surplus is substantially reduced as the cost of senior capital increases.

The effect is different on overall cost if the return on common equity is held constant, as follows:

Cost of Money With Constant Return on Common Equity

Capitalization	%	Rate	Composite	Rate	Composite
Bonds	50%	3.50%	1.75%	5.00%	2.50%
Preferred Stock	15	4.25	.64	5.75	.86
Common Stock & Surplus	35	10.00	3.50	10.00	3.50
Total	100%		5.89%		6.86%

Here, overall return has increased nearly a full point.

These tables demonstrate the two roads open to the utility commissioners. In addition, they help to illustrate the inherent pressures that are building up for increased allowances through the use of cost of money as a determinant of fair return. On the one hand, the regulatory agencies can hold the line on increases in the rate of return, thereby damaging the security holder's position. On the other hand, these agencies can reflect the increased costs of funds in the allowable return. In practice, the results have been somewhere between these extremes.

Regulator's Reaction

In order to determine the approach of the various state regulatory agencies, I have compared the return earned on the average invested capital of representative companies within each jurisdiction. Invested capital includes the book value of all long term debt, bank loans, preferred stock, common stock and surplus. However, earned surplus resulting from deferred federal income taxes has been excluded. Return is gross income adjusted to eliminate income received as a result of the flow through of deferred income taxes. This, in effect, makes the results of the various accounting jurisdictions more comparative. The following table summarizes this analysis by indicating the average return allowed on groups of companies operating under similar rate base and accounting jurisdictions.

Summary of Comparison of Return on Average Capitalization

	1951	1955	1959
	%	%	%
All 76 Companies Used in Comparison	5.83	6.18	6.18
Rate Base Determined by Original Cost	5.69	6.15	6.01
Benefits from Liberal Depreciation:			
Normalized	5.57	6.02	6.02
Flowed Through	5.42	5.66	5.56
Not Used	6.12	6.32	6.53
Rate Base Determined by Fair Value	6.02	6.35	6.25
Benefits from Liberal Depreciation:			
Normalized	5.94	6.34	6.35
Flowed Through	6.08	6.31	5.80
Not Used	6.20	6.44	6.56
States Not Having Regulatory Agency	6.89	7.19	6.93

As would be expected, the return being earned on capital is greater on the average for companies operating under fair value jurisdiction than those in original cost states. The evidence with regard to the states not having jurisdiction is not conclusive because only five companies and three states were used in the sample. As for the effect of various methods of accounting, the table indicates that, generally, those companies which normalize the benefits from liberalized depreciation are being allowed as high or a higher return on capital as they were in 1955, but those that use some method of flow through accounting have not been accorded a correspondingly higher rate so that return has decreased.

Therefore, the full benefit of the fast write off is being allowed to accrue to the companies under normalized accounting. A side factor may be that those commissions which allow normalization of the tax benefit may be more liberal than those that require flow through. However, the point remains that the use of flow through appears to penalize return.

Regardless of the various rate base determinants and accounting methods we note that the same general pattern persists. Return increased from 1951 to a high level in 1955 and after some drop in between, has returned to that level in 1959. Inflation as measured by the consumer price index has progressed at a faster rate during these last four years than it did from 1951-1955. However, operating income as a percent of revenues continued to rise throughout these periods, but increasing cost of money became an added factor which was not as easily overcome in the later period. Net income after financing charges as a percent of revenue, which increased from 14.4% in 1951, to 14.9% in 1955, was 15.0% in 1959.

This again helps to illustrate the developing two-way squeeze. Inflation defeating the effect of increased operating efficiencies and regulation limiting returns on capital as its price increases.

The attitudes of regulation are indicated by the experience of representative jurisdictions in the following table, which indicates the direction of change of return on capital:

Number of Jurisdictions in Which Return During the Period, 1955-1958:

	Increased	Decreased
Rate Base—Original Cost	12	12
Liberalized Depreciation		
Normalized	3	4
Flowed Through	2	6
Not Used	7	2
Rate Base—Fair Value		
Liberalized Depreciation		
Normalized	8	3
Flowed Through	1	4
Not Used	3	1
No Regulation by State Agency	1	2
Total	24	20

(6 jurisdictions could not be classified)

Although the overall figures indicate that return remained the same in the period, 1955-1959, in over half of the individual jurisdictions, return actually increased. Carrying this one step further, in 15 of the 50 jurisdictions studied, return increased faster or decreased more slowly than it had in the 1951-1955 period. In two other jurisdictions, the relationship over each of the two periods was the same. This indicates that some progress is being made from the investor's viewpoint in maintaining the integrity of the investment even in the face of inflation and tight money.

The steady gain in the number of increases granted and the reduction in size indicate a more general realization of the need for rate relief than was evident when few large units were granted increases.

The industry has done a magnificent job of offsetting increased operating costs through the use of larger and more efficient generating units, higher voltage transmission and other advances in the art. However, increases in the cost of money must be recognized by the regulatory agencies in the determination of return on investment, if the industry is to remain competitive for funds in the market place. Continued growth of plant is essential to this industry and reasonable return is essential to finance this growth.

THE COMMON STOCKHOLDER

In conclusion, the interests of the common stockholder must be studied because the culmination of the cross currents of operations, financing and regulation must, in the final analysis, affect his interests.

Although, as has already been pointed out, the return on invested capital has been under pressure, the common stockholder has not yet been adversely affected. Furthermore, many factors indicate that the growth in earnings per share, which, of course, is the major interest of the stockholder, will proceed at a faster rate in the future than we have seen in the past decade.

The holders of common stock of these companies have not been hurt by inflation and monetary trends, because of management's ability to control costs. The following table demonstrates the effectiveness of these controls in the past:

Distribution of the Electric Revenue Dollar
(% of Total Revenue)

Item	1948	1951	1955	1958	1959
	%	%	%	%	%
Fuel	20.0	17.2	15.9	15.8	15.5
Salaries & Wages	21.2	20.5	18.1	17.6	17.1
Maintenance and Other Operating Expense	10.8	10.2	10.3	10.4	9.7
Operating Ratio	52.0	47.9	44.3	43.8	42.3
Depreciation	9.4	9.5	10.2	10.8	11.5
Taxes	18.3	23.0	23.7	23.4	23.2
Operating Income After Tax	20.3	19.6	21.8	22.0	23.0
Amortization and Interest on Debt	6.3	6.2	6.4	6.5	6.8

During this time, the reduction in expenses more than offset increases in depreciation and taxes and more recently increasing interest charges. Although operating income has increased a substantially greater amount than interest charges, it has increased at a slower rate. Therefore, the net income available for debt service, covers these requirements fewer times today than it did a few years ago. The average interest rate on long-term debt was 3.0% in 1948, 3.1% in 1955, and jumped to 3.4% in 1958. This increase is continuing. However, income tax laws have continued to make the issuance of debt attractive at the expense of preferred stock so that total equity has decreased to about 47% from 51% of capitalization in 1948. Only this proportionate reduction in the preferred stock dividend requirements has enabled the return on common equity investment to increase.

Investment Attraction

Examination of Standard & Poor's stock market measures indicates that the capitalization of industrial companies' earnings has increased at a faster rate than those of utilities. However, the defensive qualities of the utilities' earnings at present command a higher price earnings ratio than the industrial average. Of course, individual companies vary substantially from these average results. A comparison of the increase in price-earnings ratios of utilities and industrials follows and demonstrates this factor.

Price-Earnings Ratios

Moody's Average of	Average 47-49	1959	2nd Quarter 1960	% Increase
24 Utilities	12.66	17.37	17.85	41%
125 Industrials	7.51	18.91	17.35	131%

In addition, interest rates on public utility bonds have increased at a faster rate than those of similar grade industrial bonds in recent years, as follows:

Average Price of New Capital
(Moody's weighted averages of yields
on newly issued domestic bonds)

Year	Public Utilities Composite	All Domestic Corporate Bonds	As % of Corporate Bonds
1948	3.07%	3.20%	96%
1949	3.06	3.13	98
1950	2.86	2.94	97
1951	3.25	3.35	97
1952	3.36	3.42	98
1953	3.75	3.72	101
1954	3.11	3.22	97
1955	3.30	3.56	93
1956	3.86	3.88	100
1957	4.80	4.71	102
1958	4.18	4.26	98
1959	5.13	4.94	104

Therefore, if electric utilities are to enjoy the benefits of those factors, which would enable them to grow at an increasing rate and maintain a return to the common stockholder commensurate with other investments available, recognition of increasing money costs and inflation are necessary. Otherwise utility securities will continue to lag behind industrials in their relative attraction to investors.

Future Growth

Now, looking at the future, the growth rate of earnings could exceed that of the past. Earnings per share of electric utility companies stock, on the average, grew at a compound rate of about 6% during the last 10 years. However, high reserve margins, the book value-market price relationship and continued engineering advances operating in an environment of increasing need for electric power should accelerate these past trends. Only regulation could hamper this growth.

The fact that reserve margins are high means the companies will no longer be required to add plant which makes older, but still profitable, plant non-productive. Since 1948, the industry has had to build plant at a rate faster than the increase in demand. This non-earning reserve was necessary to guarantee proper service. Now, additional plant need be added only when the increased load so warrants. For this reason and due to increased internal cash generation, proportionately less capital funds may be required from external sources. Therefore, fewer common shares will be necessary to accomplish the same growth in plant and earning power.

In addition, the market price of most electric utility companies is well in excess of the book values of these common equities. Therefore, a set number of shares adds a proportionately larger amount to equity and eases the task of maintaining acceptable capitalization ratios. Here again, fewer shares are necessary to obtain needed capital.

Larger units, direct conversion of heat to power, nuclear energy and high voltage transmission hold many opportunities for continued improvement in operating efficiencies.

Regulation Holds the Key

With this as a background in which to grow, it seems that regulation holds the key. In order to determine which states are taking the most liberal attitudes, we have ranked the 10 states in order of those allowing the highest return on capital in 1951, 1955, and 1959 on one or more companies operating within the state, as follows:

Rank	1951	1955	1959	Rank In 1951	Rank In 1955
1	Montana	Texas	Florida	10	5
2	Pennsylvania	Montana	Montana	1	2
3	Ohio	Illinois	Nevada	0	0
4	Iowa	Ohio	Texas	7	1
5	Mississippi	Florida	New Mexico	0	0
6	Kentucky	Minnesota	Indiana	8	8
7	Texas	West Virginia	Kentucky	6	10
8	Indiana	Indiana	Illinois	0	3
9	Minnesota	Pennsylvania	Ohio	3	4
10	Florida	Kentucky Wisconsin	West Virginia	0	7
Original Cost	2	4	4		
Fair Value	8	7	6		

The fact that eight of these states ranked in the top 10 at least once previously suggests reasonable stability to these relative levels of return and suggests a more liberal attitude of the regulatory authorities having jurisdiction.

Once again the evidence is clear that some form of fair value rate base is generally desirable for the investor. However, it should be understood that individual cases and regulatory climates must be interpreted due to the great variations in the determination of fair value. For example, Montana, which has been at the top of the ranking of states, recently allowed Montana Power Company a return of 5.33% on the fair value rate base which allowed increased rates to the company. In spite of this seemingly low rate of return, the fair value rate base has been high enough to allow this company to rank at or near the top of the list every year in terms of return on invested capital.

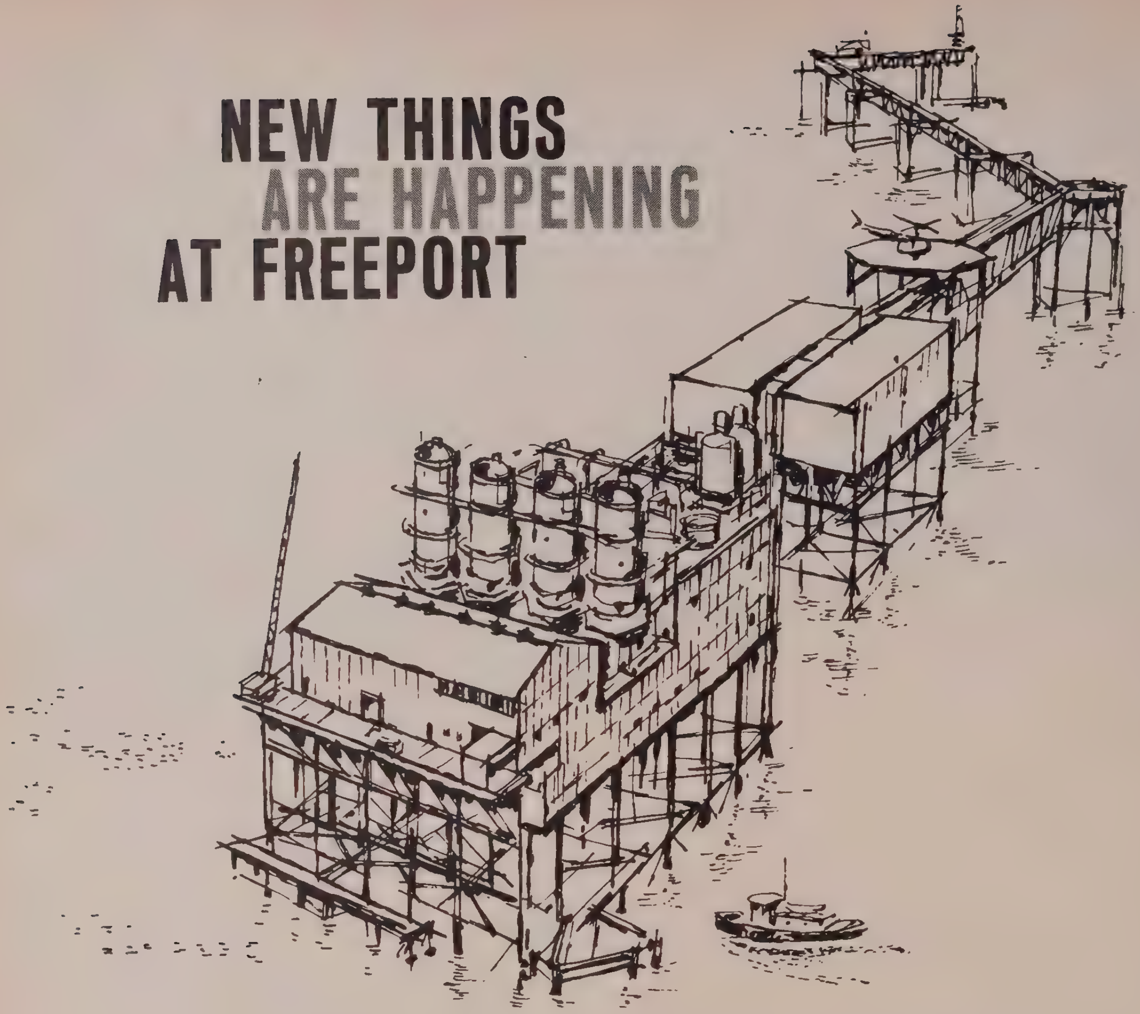
As was noted earlier, it appears that the benefits of liberalized depreciation accounting are being allowed to accrue to the companies in those jurisdictions which allow normalization of the resulting tax deferrals. Therefore, the investor may be better off when normalization is allowed or when no excess depreciation is taken for tax purposes. Of course in time, the normalization procedure should be most advantageous to the investor since it allows greater generation of funds internally if normal dividend payout policies are maintained.

In accord with this reasoning, it would appear that Montana, Texas, Indiana, Kentucky, Nevada, Florida, New Mexico and West Virginia offer opportunity from a standpoint of constructive regulatory attitudes. Others, such as Mississippi, Ohio, Iowa, Pennsylvania, and Minnesota, have lost their former positions as the regulatory climate may have become somewhat less favorable.

It is clear from this discussion that enlightened regulatory attitudes are being called for. Pressures caused by inflation and increasing money rates are building up toward higher fair rates or return. More and more statistics are becoming available to support the need for increasing returns. The responsibility for continued success of the operation from the point of view of attracting capital in competitive markets is dependent upon a rate of return which will enable the companies to maintain their credit and return on equity investment in line with that being earned in other industries with comparable risks.

As long as the cost of debt and preferred stock of electric utilities increases faster than the cost of these funds to other endeavors and as long as the stock market is not willing to increase its capitalization of common stock earnings of utilities at the same rate as other companies, the flow of funds will continue away from the utilities and the problem of obtaining necessary capital for expansion will become more difficult. For this reason, recognition of increasing money rates is necessary in public utility rate making procedures. Since, as has been pointed out, these increasing costs are being recognized more and more by regulatory authorities, the outlook for the common stockholder remains bright.

NEW THINGS ARE HAPPENING AT FREEPORT



This past year Freeport increased greatly its sulphur productive capacity and brought its developed reserves to the highest point in its forty-eight year history. The company also undertook a major new marketing program.

Two new mines were brought into production in 1960. Grand Isle, located seven miles off the Louisiana shore, ranks among the world's largest sulphur mines. Lake Pelto, a smaller property opened at year's end, brought to five the number of Freeport mines.

Under the new marketing program, the company will be able to supply consumers in major markets with sulphur in liquid form—the form in which most of it is used—rather than the traditional solid form. New liquid storage terminals being built on the inland waterways and on the East Coast will provide customers with a more convenient, a more readily usable product in quicker time.

FREEPORT SULPHUR COMPANY

161 East 42nd Street, New York 17, New York

Analysis of the Flow of Funds Through the Capital Market

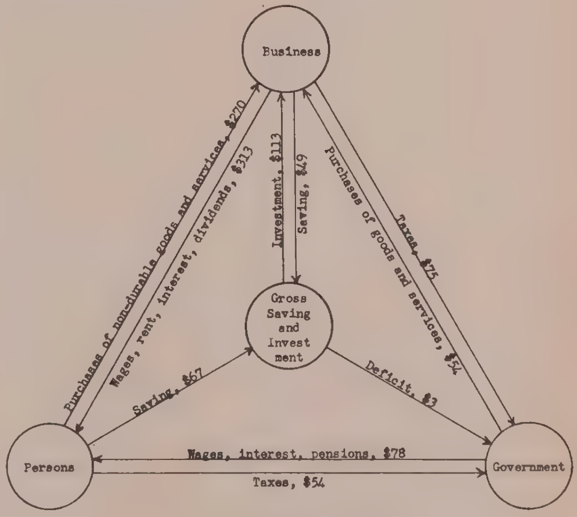
by Robert W. Mayer

For a number of years the Department of Commerce has been publishing, in the Survey of Current Business, an array of data concerning the flow of income payments between the various sectors of the economy. These data are very useful to the Financial Analyst who is interested in the "large picture"—the aggregate flows between business, persons, government, and the financial sector of the economy. Roughly summarized, the 1959 picture appears as indicated in the accompanying chart.[1]

Of especial interest is the $115 billion flow of business and personal savings into the Gross Savings and Investment sector and out of that sector into investment and into the financing of government deficits. Unfortunately for Financial Analysts, the concepts on which these figures are based are socio-economic rather than financial-economic, and therefore they are not very susceptible of financial analysis. The concept of saving, for example, is *aggregate income less aggregate consumption,* and that of investment is *formation of capital goods.* Saving and investment in the financial sense do not appear in the picture because their instruments—bank accounts, securities, and so on—are "mere" property rights and cancel out against one another in the compilation. Thus, while the Department of Commerce figures do show in some detail the ultimate sources of the $115 billion and their ultimate uses in the form of capital goods (see accompanying table entitled Gross Saving and Investment Account, 1959), they do not show the extent to which the various types of financial instruments (and what is at least equally important, the various financial institutions—banks, savings associations, insurance companies, and so on) figured in the flow of funds from the ultimate sources to the ultimate uses.

The Securities and Exchange Commission, which in its Monthly Statistical Bulletin publishes quarterly estimates of savings by individuals with a certain amount of detail as to financial instruments, has for a couple of years also published annually a reconciliation between its figures and the personal savings figures in the Department of Commerce tables.[2] This helps, but it still leaves a great deal of the most important financial flows in darkness, or rather in a sort of tantalizing half-light. It sheds no light at all, for instance, on such business savings as may be invested through the capital market rather than internally; and the institutional flow of even personal savings can only be inferred—and that incompletely—from the nature of the instruments involved. Every Financial Analyst has access, of course, to additional fragments of data—on growth and change in the asset structures of banks, savings associations, insurance companies, investment companies, and other financial institutions—but these fragments are difficult to reconcile and impossible, without prodigious effort, to put together into a single integrated system.

Since August 1959 the Board of Governors of the Federal Reserve System has been publishing data depicting the flow of saved funds (business as well as personal) through the capital market in considerable detail not only with respect to financial instruments and transactions but also with respect to financial institutions. Quarterly tables with an annual summary are published in the Federal Reserve Bulletin.[3] These figures are a real bonanza to the Financial Analyst because they afford him an opportunity to study the flow of funds through almost every significant channel in the capital market. Even the few important channels, which are not depicted separately, can easily be "broken out" by resort to readily available collateral data. He can watch the flows through the different channels, furthermore,


Business
Purchases of non-durable goods and services, $270
Wages, rent, interest, dividends, $313
Investment, $113
Saving, $49
Purchases of goods and services, $54
Taxes, $75
Gross Saving and Investment
Saving, $67
Deficit, $3
Persons
Wages, interest, pensions, $78
Taxes, $54
Government

Inter-Sector Flows, 1959
(billions)

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[1] Footnotes at end of article.

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in reasonable confidence that the various figures are in proper perspective. The Federal Reserve Board staff comprises able financial statisticians who can be counted on to insure that the figures are comparable and that the system is integrated, or "closed," with only minor discrepancies. Finally, the system is also integrated closely—not perfectly, but closely enough for practical purposes—with the above mentioned Department of Commerce system depicting the flow of funds which arise from other sources as well as from saving.

The accompanying table entitled Flow of Funds, 1959 has been adapted from the 1959 summary, the principal amendments being:

(a) The components of Gross Saving are shown at the top, those of Gross Investment at the bottom, with the Increases of Financial Assets and Liabilities (which facilitate all of the inter-sector, and even some of the intra-sector, flow from the one to the other) in between. Sector statistical discrepancies are adjusted to include the effects of rounding the item totals and are attributed to Gross Investment, as in the Department of Commerce system, in order that the totals of Gross Saving and Gross Investment for the system as a whole may reflect their conceptual equality.

(b) The "Savings Institutions" sector is divided into "Mutual Savings Banks" and "Savings Associations," "Uninsured Private Pension Funds" are drawn out of the "Insurance" sector, and "Mutual Funds" are drawn out of the "Finance not elsewhere classified" sector.

(c) The transaction category "Corporate stock" is divided into "Corporate stock" and "Mutual fund shares."

Before interpreting the table, it may also be appropriate to call attention to certain basic concepts which may not all be obvious or familiar. The first is that Gross Saving is taken to include capital consumption (mainly depreciation) allowances. This concept, which is a part of the system used by the Department of Commerce as well as that used by the Federal Reserve Board, reflects the accounting and financial principle that a business firm's depreciation expense charges, provided they are covered by earnings, have the effect of preserving an equivalent amount of earnings from dissipation as dividends and thus of constituting a source of funds for internal investment, and in that sense they are a form of saving. Since the new assets acquired in such internal investment are presumably in replacement of the assets whose expiration of value is accounted for in the depreciation charges, such saving is not considered to be part of the "net" saving which increases the total stock of capital goods.

A second of these concepts is in the treatment of residential housing as capital and its construction as investment. This treatment, of course, is contrary to the economic theory of a generation ago that, in order to be regarded as capital, assets must produce financial income. Economists of today "justify" it on the ground that the distinction between consumption goods and capital goods is more essentially a question of whether they yield up their value over a short time or over a long time.

Gross Saving and Investment Account, 1959
(billions)

Inflow		
Personal saving:		
Capital consumption allowances	$43.4	
Net saving	23.4	
Total		$ 66.8
Business saving:		
Capital consumption allowances	$40.5	
Undistributed corporate profits	10.5	
Corporate inventory valuation adjustment	—0.5	
Statistical discrepancy	—1.9	
Total		$ 48.6
		$115.4
Outflow		
Investment:		
Residential construction	$22.3	
Consumer durable goods	43.4	
Plant construction	18.0	
Producer durable equipment	25.8	
Increase of inventories	5.9	
Net foreign investment	—2.5	
Total		$112.9
Government:		
Deficit		2.5
		$115.4

Source: Survey of Current Business, July 1960, p. 12.

These two concepts, common to the Federal Reserve Board's and the Department of Commerce's systems, are of fairly long standing and are pretty widely accepted among economists. A third concept, not so widely accepted (at least as yet), is in the treatment, in the Federal Reserve Board's system, of consumer durable goods as capital and their purchase as investment. Justification for such treatment is placed on the same basis as that indicated above for regarding residential construction as investment.[4] Consistently with this, Gross Saving is taken to include allowances for consumption of old consumer durable goods. The estimate of the amount of such allowances, incidentally, is on a "current cost basis"[5]—that is, it is taken to be identical with the amount of new consumer durable goods acquired. The Department of Commerce has not adopted this concept. In preparing the figures for the chart at the beginning of this article, therefore, purchases of consumer durable goods ($43.4 billion) had to be shifted from personal purchases to personal saving and to investment in order that the flow into and out of the Gross Saving and Investment sector would be comparable with the Federal Reserve Board figures which are the center of our attention.

A fourth concept to which attention should be called is that of "flow" itself. The flow of funds involved in any particular item is measured simply by the change of total holdings of the item between the beginning and the end of the period. It is "net." The gross flow of check currency, for one example, and of funds involved in secondary trading in corporate securities, for another, are certainly many times the indicated net flows. Caution must be exercised, therefore, to avoid inferring "turnover" from the apparent relation between net flow of funds and average holding of any item.

Two different approaches to the analysis of fund flows by the use of this type of "input-output" table are immediately apparent. The first is through examination of the various sectors (vertical columns) in turn, cutting across the "transaction categories" (horizontal lines) to indicate the instrumentalities by which the inter-sector fund flows were facilitated.

The principal supplier of funds to the capital market, of course, was the personal or consumer sector. Largely out of their savings, consumers poured $9.4 billion into the purchase of Federal obligations other than U. S. Savings Bonds, $7.3 billion into savings association shares, and $2.5 billion into municipal (state and local government) bonds. Furthermore, they fed $4.1 billion into the market indirectly through time deposits, $3.7 billion through contributions of life insurance reserves and $7.9 billion to pension fund reserves, and $1.5 billion through purchases of mutual fund shares. These figures were not greatly different from those of the preceding year, the only large changes being an increase of the flow into Federal obligations other than U. S. Savings Bonds and a decrease of the flow into time deposits. Minor changes were a decrease of the flow into currency and demand deposits, and increases of the flow into pension funds and municipal bonds.

The general pattern of financial investment by consumers in 1959 (*sic*) invites the comment that the portion in forms (equities—particularly corporate common stocks) which might be expected to respond favorably to the prospect of continued inflation remained a remarkably small fraction of the total. Even if one imputes to this category the stock investments of such financial intermediaries as insurance companies, uninsured private pension funds, and mutual fund companies, the total is only about $3.0 billion, less than a tenth of the amount which went into "fixed value redeemable claims" and other forms whose value would certainly be eroded by continued upward movement of the general price level.

This is not to suggest that such investment policy is inexplicable or irrational. Many individual's saving and investment behavior is largely determined by deeply rooted habit or, as in the case of insurance premium payments and pension fund deductions, by commitments which are difficult to amend or are motivated by considerations in which the investment aspect is secondary. Others regard the installment payment payments they make on their residential mortgages and even on their consumer durable goods indebtedness as a substitute for stock investment since such payments have the effect of building up their ownership equity in long lived physical assets whose value they expect to be increased (or the decline of whose value they expect to be retarded) by an increase of the general price level. Still others, concerned about the current productivity of their financial investments, were undoubtedly influenced in 1959 by the fact that stock yields were low and declining while bond yields (and other interest rates) were high and rising. The last mentioned point is borne out by the net outflow of individual investors' funds from U. S. Savings Bonds, $1.8 billion, on which the effective return was low relative to competing investment opportunities and was adjusted upward only after long delay.

Consumers' principal demands on the capital market were in borrowing $13.2 billion on mortgage loans for residential construction and $6.3 billion on credit for the purchase of consumer—mostly durable—goods. They also withdrew $6.1 billion from their proprietary investments in unincorporated business firms, liquidated $1.8 billion of their U. S. Savings Bonds, and reduced their holdings of corporate stocks by $0.4 billion. All of these demands for funds represented substantial increases over the previous year.

Drain on the Capital Market

Although the domestic non-financial business sectors were a net drain on the capital market, as is usually the case, they made one significant contribution to the supply of funds in the form of a $4.4 billion investment in Federal obligations, a large increase over the preceding year. Most of these sectors' demand upon the capital market's funds was for the sale of $3.3 billion of bonds and $2.3 billion of capital stock, for $5.7 billion of mortgage loans, and for $5.9 billion of commercial bank loans. All of these except the stock sale represented considerable increases over the preceding year.

On balance, the foreign (rest of the world) sector was a supplier of funds, it principal flows arising from the purchase of Federal obligations in the amount of $2.8 billion and of gold in the amount of about $1.0 billion. The bond purchase represented a large increase over the preceding year, but the outflow of gold was only about half that of 1958.

The deficits of the government sectors kept them from making any substantial contribution to the supply of funds in 1959 and caused them to demand $11.3 billion for the sale of Federal obligations other than U. S. Savings Bonds and $4.9 billion for state and local obligations. The former figure was a major increase from the preceding year, the latter figure a minor decrease.

Turning now to the financial institutions sectors which constitute the heart of the capital market, we see that, in marked contrast with the preceding year, only $1.1 billion flowed into the commercial banks in demand deposits and $1.2 in time deposits. The bulk of their funds were provided by selling off $7.1 billion of their holdings of Federal obligations—a tremendous shift of position from the preceding year in which they *added* almost half again that much to their holdings. They fed out $7.9 billion in commercial loans and $2.4 billion in

	Consumer Sector		Non-Financial Business Sectors						Government Sectors			
			Farm		Non-Corp.		Corporate		Federal		St. & Lc.	
	U	S	U	S	U	S	U	S	U	S	U	S
GROSS ECONOMIC SAVING												
a Capital consumption	-------	43.4	-------	4.1	-------	8.2	-------	23.3	-------	-------	-------	-------
b Net Saving		30.6						11.4		−4.5		−4.4
c Subtotal		74.0		4.1		8.2		34.7		−4.5		−4.4
INCR. OF FIN. ASSETS & LIABS.												
d Gold and Treasury currency	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
e Currency and demand deposits	0.9	-------	−0.4	-------	−0.3	-------	0.2	-------	0.7	-------	0.5	-------
f Time deposits	4.1	-------	-------	-------	-------	-------	−0.4	-------	-------	−0.2	−0.4	-------
g Savings shares	7.3	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
h U. S. Savings Bonds	−1.8	-------	-------	-------	-------	-------	-------	-------	-------	−1.8	-------	-------
i Life insurance	3.7	-------	-------	-------	-------	-------	-------	-------	-------	0.1	-------	-------
j Insured pvt. pension funds	2.0	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
k Government pension funds	2.7	-------	-------	-------	-------	-------	-------	-------	-------	0.9	-------	1.8
l Unins. pvt. pension funds	3.2	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
m Federal obligations	9.4	-------	-------	-------	-------	-------	4.4	-------	-------	11.3	1.0	-------
n St. & loc. govt. oblig.	2.5	-------	-------	-------	-------	-------	-------	-------	-------	-------	0.5	4.9
o Corporate & foreign bonds	0.1	-------	-------	-------	-------	-------	-------	3.3	-------	-------	1.2	-------
p Corporate stocks	−0.4	-------	-------	-------	-------	-------	-------	2.3	-------	-------	-------	-------
q Mutual fund shares	1.5	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
r Residential mortgages	0.5	13.2	-------	-------	-------	0.1	-------	0.1	1.6	-------	0.1	-------
s Other mortgages	1.8	0.1	-------	1.1	-------	1.4	-------	3.2	0.6	-------	0.1	-------
t Consumer credit	-------	6.3	-------	-------	0.4	-------	0.8	-------	-------	-------	-------	-------
u Security credit	−0.2	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
v Bank loans n.e.c.	-------	0.4	-------	0.7	-------	2.7		2.5	-------		-------	-------
w Other loans	-------	0.5	-------	0.2	-------	0.6	0.3	0.4	1.6	−0.6	-------	0.2
x Trade credit	-------	0.1	-------	-------	-------	3.4	6.8	3.3	-------	0.1	-------	-------
y Prop. inv. in uninc. ent.	−6.1	-------	-------	−1.1	-------	−5.0	-------	-------	-------	-------	-------	-------
z Misc. financial transact.							1.3	0.1	1.8	1.0		
aa Subtotal	31.2	20.6	−0.4	0.9	0.1	3.2	13.4	15.2	6.3	10.8	3.0	6.9
GROSS ECONOMIC INVESTMENT												
bb Consumer durable goods	43.4	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
cc Non-farm resid. constr.	18.5	-------	-------	-------	1.9	-------	1.9	-------	-------	-------	-------	-------
dd Plant and equipment	3.7	-------	4.9	-------	8.9	-------	25.5		-------			-------
ee Change in inventories	-------	-------	0.5	-------	0.6	-------	4.8	-------	-------	-------	-------	-------
ff Statistical discrepancy	−2.2				−0.1		4.3				−0.5	
gg Subtotal	63.4		5 4		11.3		36.5				−0.5	
GRAND TOTAL	94.6	94.6	5.0	5.0	11.4	11.4	49.9	49.9	6.3	6.3	2.5	2.5

U = Uses. S = Sources. U.P.P.F. = Uninsured Private Pension Funds.

Sources: General: Federal Reserve Bulletin, August 1960, p. 938.
Separation of Mutual Savings Banks from Savings Institutions sector: Federal Reserve Bulletin, August 1960, p. 885.

consumer credit, both of these sums representing large increases over the preceding year.

The mutual savings banks were an almost static factor in the capital market during 1959. Growth of their time deposits was only $0.9 billion, less than half that of the preceding year. They continued the expansion of their mortgage loans and took up the slack by discontinuing their acquisition of corporate securities.

Continued rapid growth is observed in the savings associations where $7.2 billion of new money was raised by the sale of new shares. Virtually all of these funds, of course, went into continued expansion of their residential and other mortgage holdings.

Insurance companies continued to be a dominant institutional channel for the flow of funds through the capital market. Their new money came to them in the form of additions to their life insurance reserves, $3.6 billion, and to their pension fund reserves, $2.0 billion, both figures being slightly greater than corresponding figures for the preceding year. They invested the new funds very much in accordance with the usual pattern of insurance company investment—although with a little less emphasis on additions, $2.4 billion, to their corporate bond holdings and a small absolute increase (a large relative increase, to be sure) of emphasis on additions, $2.0 billion, to their corporate stock holdings.

Insured vs. Uninsured

The uninsured private pension funds continued to be noteworthy as the largest channel—and the most rapidly growing—for the flow of funds into equity investment. Their net receipts of $3.2 billion constituted a sizeable increase over the preceding year and reflected a greater absolute (although not relative) growth than that of the insured pension fund reserves. It will be interesting to see whether, with the abatement of their tax advantage, the uninsured funds will continue to outspace the growth of the insured funds. The uninsured funds put

(In Billions of Dollars)

Financial Institutions Sectors														Rest of Wld. Sect.		Statist. Discrep.		All Sectors		
Com. Bnks.		Savg. Bnks.		S&L Assns.		Ins. Cos.		U.P.P.F.		Mut. Fds.		Oth. Inst.								
U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	
																			79.0	a
	1.5		0.2		0.7		1.2						−0.5		2.5				38.7	b
	1.5		0.2		0.7		1.2						−0.5		2.5				117.7	c
−1.0														1.1			0.1	0.1	0.1	d
	1.1	−0.1		−0.1		0.1				0.2		−0.1		0.1			0.6	1.7	1.7	e
	1.2		0.9	−0.1	0.3									−1.0				2.2	2.2	f
				−0.1	7.2													7.2	7.2	g
																		−1.8	−1.8	h
							3.6											3.7	3.7	i
							2.0											2.0	2.0	j
																		2.7	2.7	k
									3.2									3.2	3.2	l
−7.1		−0.4		1.0		0.1		0.1				0.1		2.8			0.1	11.4	11.4	m
0.4		−0.1				1.4						0.1				0.1		4.9	4.9	n
−0.2						2.4		1.1				0.2	1.0	0.1	0.5		0.1	4.9	4.9	o
	0.1					0.2		1.7		1.2		−0.2	0.3	0.4	0.2			2.9	2.9	p
											1.5							1.5	1.5	q
1.3		1.8		6.4		1.1		0.2				0.2				0.2		13.4	13.4	r
1.1				1.2		1.0												5.8	5.8	s
2.4				0.8								1.9						6.3	6.3	t
0.2																		0.0	0.0	u
7.9					0.1								1.3		0.2			7.9	7.9	v
−0.6			0.1		0.7	0.4		0.1				1.0	0.5	−0.1			0.1	2.7	2.7	w
						0.1												6.9	6.9	x
																		−6.1	−6.1	y
	0.2			−0.1									0.1	2.4	3.2		0.8	5.4	5.4	z
4.4	2.6	1.2	1.0	9.0	8.3	6.8	5.6	3.2	3.2	1.4	1.5	3.2	3.2	5.8	4.1	0.3	1.8	88.9	88.9	aa
																		43.4		bb
																		22.3		cc
0.4						0.4												43.8		dd
																		5.9		ee
−0.7						−0.4				0.1		−0.5		0.8		1.5		2.3		ff
−0.3										0.1		−0.5		0.8		1.5		117.7		gg
4.1	4.1	1.2	1.2	9.0	9.0	6.8	6.8	3.2	3.2	1.5	1.5	2.7	2.7	6.6	6.6	1.8	1.8	206.6	206.6	

Statistical discrepancies include effects of rounding item totals.

Separation of Uninsured Private Pension Funds from Insurance sector: Securities and Exchange Commission Monthly Statistical Bulletin, June 1960, pp. 5-7.
Separation of Mutual Funds from Finance n.e.c. sector: National Association of Investment Companies Quarterly Statistical Summaries.

more than half, $1.7 billion, of their new money into corporate stocks. Although the Securities and Exchange Commission now publishes a report of its annual survey of the activities of "Corporate Pension Funds,"[6] not much detailed knowledge of their investment activities is publicly available. (This is particularly true of funds administered by unions and non-profit organizations, which are not included in the survey.) The bulk of their investment is done by a mere handful of large banks and is subject to little, if any, effective regulation. One can perhaps be excused a considerable curiosity about the stock portfolios accumulating in the hands of these institutions whose rapid growth has been the outstanding financial phenomenon of the last decade.

The mutual fund companies continued to grow in an amount, $1.5 billion, about the same as in the preceding year. Of this new money, they invested $1.2 billion in corporate stock. Thus, although overshadowed by the uninsured private pension funds, the mutual fund companies continue to be of great significance as the second largest institutional channel for the flow of funds into equity investment.

A second approach (to flow of fund analysis) to which the new Federal Reserve data are adapted is through the examination of the various "transaction categories" (horizontal lines), cutting across the sectors (vertical columns) to indicate the inter-sector flows they facilitated. For example, it will be observed that of the $6.3 billion of funds made available in the form of "consumer credit," $2.4 billion came from commercial banks, $1.2 billion from non-financial business firms, $0.8 billion from savings associations, and $1.9 billion from other financial institutions.

Some of the fund flows were simple and obvious. All of the funds received by savings associations and mutual fund companies for the sale of new shares came from the consumer sector. So did all the funds flowing into insurance companies' reserves, both for life insurance and for insured private pension funds, and into uninsured private pension funds. The funds flowing into state and local governments in exchange for their sales of $4.9 billion of bonds did not all come from a single source; but they can largely be accounted for fairly simply by totaling up the purchases of the bonds by consumers, $2.5 billion, by other state and local governments, $0.5 billion, by commercial banks, $0.4 billion, by insurance companies, $1.4 billion, and by other financial institutions, $0.1 billion.

Other flows were more complex. Time deposits, for example, were a source of $1.2 billion of new funds to the commercial banks, $0.9 billion to the mutual savings bank, and $0.3 billion to the savings associations, a total of $2.4 billion. Consumers, however, fed $4.1 billion into the market via this medium, the difference being attributable to net withdrawals of $1.4 billion by non-financial business firms (including foreign firms), $0.4 billion by state and local governments, and $0.1 billion by savings associations from their bank accounts, and by consumer net withdrawals of $0.2 billion from their Federal Postal Savings accounts.

Bonds Supply Funds

Federal obligations other than U. S. Savings Bonds, for another example, provided $11.3 billion of new money to the Federal government, and reduction of their holdings of such obligations brought $7.1 billion to the commercial banks and $0.4 billion to the mutual savings banks, a total of $18.8 billion. These funds were supplied through the purchase of such bonds by consumers in the amount of $9.4 billion, by non-financial business firms (including foreign firms) $7.2 billion, by state and local governments, $1.0 billion, by savings associations, $1.0 billion, by insurance companies, $0.1 billion, by uninsured private pension funds, $0.1 billion, and by other financial institutions, $0.1 billion.

Residential mortgage loans made it possible for consumers to raise $13.2 billion and non-financial business firms, $0.2 billion. These funds were supplied by mortgage lenders as follows: other consumers, $0.5 billion; Federal, state and local governments, $1.7 billion; commercial banks, $1.3 billion; mutual savings banks, $1.8 billion; savings associations, $6.4 billion; insurance companies, $1.1 billion; uninsured private pension funds, $0.2 billion; other financial institutions, $0.2 billion.

Through the issuance of bonds, non-financial business firms (including foreign firms) drew upon the market for $3.8 billion of new funds and "other financial institutions" for $1.0 billion. This demand was augmented by the sale of $0.2 billion of their corporate bond holdings by commercial banks. The funds were supplied by purchase of such bonds in the following amounts: consumers, $0.1 billion; state and local governments, $1.2 billion; insurance companies, $2.4 billion; uninsured private pension funds, $1.1 billion; other financial institutions, $0.2 billion; and foreign firms, $0.1 billion.

Corporate stock issues raised $2.5 billion of new money for non-financial business firms (including foreign firms); $0.1 for commercial banks; and $0.3 for other financial institutions. To this demand for funds, consumers added $0.4 billion and "other financial institutions" $0.2 billion by selling part of their holdings of corporate stocks. The requisite funds were supplied through corporate stock purchases by uninsured private pension funds in the amount of $1.7 billion, by mutual funds in the amount of $1.2 billion, by foreign business firms in the amount of $0.4 billion, and by insurance companies in the amount of $0.2 billion.

RATIO ANALYSIS

Emphasis in this paper has been focused mainly on calling attention to the new Federal data and indicating how the tables are to be read. The Financial Analyst, who is sharply aware that financial figures have little meaning until they are related to one another, will say at once: "Very well. Now let us turn our attention to the question of how we shall treat these data in order to bring forth their meaning." The answer, of course, is through ratio analysis. A few hints have been dropped—in calling attention, for example, to the fact that one sector contributed a much larger flow of funds to the capital market than another sector and that one type of financial instrument was much more utilized than another—but only in a very elementary and non-technical way. Development of a complete system of ratio analysis of the aggregate flows of capital funds is perhaps an excellent project for the future.

In summary, it may be said that the Flow of Funds statements now published in the Federal Reserve Bulletin are a significant new contribution to the stock of materials available to the Financial Analyst. They have their limitations, of which the chief one is that they depict only net inter-sector flows for the period. Thus they convey little information about intra-sector flows and none at all about either intra- or inter-sector gross flows (that is, ebbs and flows) within the period. In spite of this limitation, however, they open the door to some types of ratio analysis of financial aggregates which, as a practical matter, have not heretofore been available.

Footnotes

1. Figures in the chart are adapted from Summary Data 1959 in the Survey of Current Business, July 1960, p. 12. The principal adaptation is in treating purchases of consumer durable goods as investment and their consumption as saving.

2. The 1959 reconciliation appears in the Monthly Statistical Bulletin for July 1960, p. 7 and in the Survey of Current Business for July 1960, p. 26.

3. The 1959 annual summary appears in the Federal Reserve Bulletin for August 1960, p. 938.

4. They "yield their services over time and thus in principle are part of capital formation." Federal Reserve Bulletin for August 1959, p. 835.

5. Federal Reserve Bulletin for August 1959, p. 836.

6. The latest appearing in the Monthly Statistical Bulletin for June 1960, pp. 2-7.

Federation's 14th Annual Convention Plans

(Continued from page 59)

Dick, division vice president, Radio Corporation of America.

Also: David H. Dawson, vice president, E. I. duPont de Nemours and Company; Paul Mayfield, vice president, Hercules Powder Company; Irwin H. Will, chairman, and A. H. McDowell, president, Virginia Electric & Power Company; H. R. Hanmer, vice president for Research & Development, and other executives of American Tobacco Company; Chandler H. Kibbee, executive vice president, Finance, and other officers of Philip Morris, Inc.; Frank L. Linton, vice president and comptroller, Allied Chemical Corporation.

Also: David L. Luke, president, West Virginia Pulp & Paper Company; Lawrence J. Kavanagh, treasurer, West Virginia Pulp & Paper Company; Vice Presidents John H. Krey, W. Monroe Wells, and other officers of Reynolds Metals Company; duPont's William T. Wood, general director of Textile Fibers Manufacturing, Ford B. Draper, general director, Textile Fiber Marketing, and Millard G. Gamble, director of Industrial Marketing Division; Hercules Powder's E. B. Morrow, vice president and chairman of finance, and J. M. Martin, vice president and director; Henry S. Beers, president, Aetna Casualty & Surety Company; Fraser B. Wilde, president, Connecticut General Life Insurance Company; Charles A. Taylor, president, Life Insurance Company of Virginia; William J. Erwin, president, Burlington Industries; Robert T. Stevens, president, J. P. Stevens Company, Inc.; and many others.

In addition to General Chairman Jennings, State Planters Bank of Commerce & Trusts, the convention committee includes:

George S. Kemp, Jr., Abbott, Proctor & Paine, vice chairman; Walter W. Craigie, F. W. Craigie & Company, program chairman; R. Pierce Lumpkin, Edward G. Webb & Company, forum chairman; John B. Purcell, First & Merchants National Bank, field trips chairman; Coleman Wortham, Jr., Davenport & Company, social chairman; B. B. Munford, III, Davenport & Company, vice chairman; Henry Lee Valentine, Davenport & Company, ladies' program chairman; Clifton M. Miller, Jr., Atlantic Life Insurance Company, arrangements chairman; Berkley M. Adams, registration chairman; T. Foster Witt, Jr., Scott & Stringfellow, hotel chairman; James L. Londrey, Life Insurance Company of Virginia, transportation chairman; Frederick Deane, Jr., The Bank of Virginia, publicity chairman; and B. Walton Turnbull, State Planters Bank of Commerce & Trusts, finance chairman.

The Board of Regents Announces

The 1961 Financial Analysts Seminar

To be conducted by

The National Federation of Financial Analysts Societies
in association with the University of Chicago

TO BE HELD AT **BELOIT COLLEGE** FROM **AUGUST 21** TO **AUGUST 26, 1961**

The seminar provides a unique opportunity for top-flight senior analysts to hear noted educators, economists and analysts. The seminar includes lectures and panel discussions.

A copy of the brochure and form for application for admission will be sent to all members of constituent societies of the National Federation on March 17, 1961. It is suggested that applications be submitted promptly after receipt of this material. Attendance at the seminar is limited to 100 analysts.

Those desiring additional information should write to **Marshall D. Ketchum**, *Director of the Financial Analysts Seminar, Graduate School of Business,* **University of Chicago, Chicago 37, Illinois.**

IDEAS
that have grown into
PRINCIPLES

Fifty-three years ago a determined furnace maker set up shop in Holland, Michigan, with the future of his company pegged to some ideas that were quite outlandish for the times. *Idea One*: The future of heating would be centered in the warm air furnace, even though it was then more resisted than accepted. *Idea Two*: The design and quality of the warm air furnace would have to be its own best answer to the skeptics. *Idea Three*: Full responsibility for correctly installing the warm air furnace and its distribution system should be directly assumed by the manufacturer. *Idea Four*: To effectively advance the future of warm air heating, customer satisfaction would have to be assured through direct service from locally established factory branches.

These underlying ideas gave the new furnace company something to crusade for with dedicated pioneering spirit. By holding to them with undeviating determination they became realities.

Warm air heating has become the accepted method of heating — a method that is taken for granted without question. Holland Furnaces have become famous for their design and quality. Holland Furnaces have made Warm Friends by the millions. Holland Branches have become local strongholds of direct heating service in thousands of communities.

Holland Furnace Company now has these 53 years of ratifying the soundest ideas in heating, and of giving it unmatched resources for meeting all the challenges that every new day brings forth on the heating scene. The dedicated furnace maker of 1906, John P. Kolla, gave Holland Furnace Company the principles which have become tradition for continually projecting the future of the Company upon the most thoroughly time-tested foundation in the heating business.

HOLLAND
FURNACE COMPANY
World's Largest Installers of Home Heating Equipment
Main Office and Plants at Holland, Michigan

GN
GOULD-NATIONAL
BATTERIES, INC.
Manufacturers of a complete line of automotive, industrial and military storage batteries plus motive specialties.

A REGULAR QUARTERLY DIVIDEND
of 30¢ per share on Common Stock, was declared by the Board of Directors on Oct. 11, 1960 payable December 15, 1960 to stockholders of record on December 2, 1960.

This represents a 20% increase over the 50¢ quarterly dividend paid prior to the two-for-one stock split made on August 16, 1960.

A. H. DAGGETT
President

ST. PAUL, MINN.

Southern California Edison Company

DIVIDENDS

The Board of Directors has authorized the payment of the following quarterly dividends:

COMMON STOCK
Dividend No. 204
65 cents per share;

PREFERENCE STOCK,
4.48% CONVERTIBLE SERIES
Dividend No. 55
28 cents per share;

PREFERENCE STOCK,
4.56% CONVERTIBLE SERIES
Dividend No. 51
28½ cents per share.

The above dividends are payable January 31, 1961 to stockholders of record January 5. *Checks will be mailed from the Company's office in Los Angeles, January 31.*

Common Stock Dividend No. 204 is not payable upon the shares of Common Stock to be distributed on or prior to February 24, 1961 as a result of the stock dividend declared November 17, 1960 by the Board of Directors.

P. C. HALE, *Treasurer*

December 15, 1960

Edison

United States Depreciation Tax Policies

'The Most Backward in the World'

by Norvin R. Greene

THE UNITED STATES IS BURDENED with archaic depreciation tax policies, seemingly and strangely dedicated to hampering our nation's growth. In sharp contrast is Europe, with wise and realistic handling of depreciation.

Now that John Kennedy has been elected President he has the opportunity to prove that his professed self-dedication to growth of the United States economy was not merely the usual pre-election vote-getting talk.

Extensive hearings on U. S. tax policies were held by a Senate Committee in July 1959 and by a House Committee in November 1959. Tax changes in an election year 1960 were not to be expected. Close observers view Congressional action on depreciation in 1961 as probable, if supported by the Administration. From the Senate Committee hearing, here is testimony which presents comparison of U. S. outmoded tax depreciation policies with Europe's more intelligent approach.

(Here is an excerpt from a July 24th, 1959, Senate Committee hearing. The witness was Maurice E. Peloubet, certified public accountant of the well-known New York firm of Pogson, Peloubet & Co.).

Senator Smathers: Is there any country in the world that has a more restrictive depreciation policy than the United States, with respect to depreciation on machinery?

Mr. Peloubet: I made quite a research into it, and I have never found one. We are no doubt the most backward country in that respect.

Senator Smathers: Here we are supposed to be keeping up with the commercial development of all other countries of the world, and you say our policy is the most restrictive?

Mr. Peloubet: There is no question about it. I have an appendix which gives the methods in all industrial countries. And all you have to do is to look through that and see that this is a correct statement.

Mr. Peloubet's testimony was followed by that of Joel Barlow, nationally recognized depreciation and tax authority, a law partner of former Secretary of State Dean Acheson. Excerpted from his testimony is the following: "The relative obsolescence of American industry is not unrelated to the depreciation policies of other leading nations, as we know. Once again I wish to emphasize that the United States is the most backward of the leading industrial nations in tax depreciation policy. . . . Now while other nations forge ahead, and Russia is investing in capital goods at an astounding rate, we are operating under a depreciation system more than a quarter of a century old, a system that has a profound deterrent effect on capital investment, and is particularly hard on taxpayers with restricted access to outside capital."

Our national tax depreciation policy affects a company's capacity for economic progress and that of the nation as much or more than any other government fiscal policy. Today under Treasury depreciation policy, machine tools are being written off on the average in about 15 to 20 years (some over 33-1/3rd years), while it is perfectly evident that the write-offs should be completed in six to not more than 10 years. And from now on not much of our machine tool inventory older than six years will qualify as modern first line equipment.

Tax depreciation has an important effect on our country's ability to control inflation, to meet foreign competitive products, and our ability to compete economically with the Soviet Union. Given a realistic depreciation policy, there will be no need to worry about high tariffs and quotas on importation of foreign machinery. Without such a changed depreciation policy, we might some day find Western Europe and Japan taking over our export business and invading our domestic markets. Today for the first time these countries have an industrial plant as efficient as ours. Their wage rates are only 17% to 33% of ours.

Here is a quick summary of European and Canadian depreciation policies:

(1). In West Germany the experience has been that production machinery and equipment can be charged off over a 10-year period, with accelerated deductions in the early years.

(2). In Denmark, 50% of the cost of machinery can be deducted in the first five years.

(3). In Sweden, machinery and equipment can be written off in two to five years.

(4). In Holland, a 10-year write-off is normal, with accelerated rates in the early years, and an investment allowance that permits deductions of more than 100% of costs. This investment allowance is in recognition of inflation.

(5). France and Italy have allowed important depreciation adjustments for the effect of inflation, involving the ability to write off replacement costs.

(6). The United Kingdom permits in the first year an initial investment allowance of 30% for machinery

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Norvin R. Greene, a partner of Lancaster & Norvin Greene, New York, is a graduate of Williams College. He is a well-known writer and lecturer on investments.

and equipment. This is in addition to full depreciation at accelerated rates in the early years, and shorter periods of write-off than those of the U. S.

(7). For the past 10 years, Canada has followed a basic grouping system under which depreciation rates are twice or more the comparable U. S. rates. While the U. S. Treasury sets only maximum depreciation rates, Canada also sets minimum rates. Thus, Canadian regulation recognizes the imperative need to get rid of obsolete machinery and equipment, to keep production costs low.

Conferences Aid Schedules

In both Great Britain and Canada, it is often possible to sit down with the tax authorities and work out depreciation schedules at a faster rate than specified in the regulations. Aluminum Ltd., in Canada, has done so for most of its major capital expenditures.

The U. S., with its antiquated depreciation rates and its obsolete *Bulletin F,* prescribing absurdly long useful-life for machinery and equipment, tends especially to penalize small business. Small companies' past experience has been long usage of machinery. By way of contrast, the huge auto and chemical companies have characteristically scrapped much equipment in shorter periods of years. Actual experience, plus the ability to convince the Internal Revenue Department, can today shorten the equipment life-schedules as set forth in the *Bulletin F*. The small company is handicapped by its experience of long usage, and by its lack of ability to successfully argue its case for shorter life.

What are the prospects for improving our antiquated depreciation laws? It would have been surprising to have such constructive legislation enacted by Congress in the election year of 1960. However, there are indications that it may be effected in 1961.

More than a straw in the wind is the attitude of a professional liberal, Senator Wayne Morse. Senator Morse is a member of the Senate Committee which heard Maurice Peloubet and Joel Barlow testify, as previously indicated.

Here are a few rather interesting excerpts from Senator Morse's comments at the hearing:

"I wish some way, somehow, we could get the sound economics of the first two witnesses (Peloubet and Barlow) before the whole Senate and the whole Congress, and understood by them. . . ."

* * *

"I happen to believe they are unanswerably right, that we are dealing here with some problems of abstract economics which in some way, somehow, we have got to get enacted into law."

* * *

"There is no doubt about the fact that we must get rid of *Bulletin F*. It has simply become outmoded."

* * *

". . . May I say to my Liberal friends in Congress, we have a job to do, because here is a place we can make a great contribution, I think, to the public life, because Liberals can never justify taking a stand on economic issues which is political and not economic. Too often Liberals do that.

* * *

"We have got to get across to American public opinion the application of the sound tax economics that I think you men are advocating this morning, which does not in any way cheat the American taxpayer."

* * *

"If you do not get this kind of tax reform, you are going into an economy of cartelism or monopoly."

* * *

Some of the measures favorably viewed by the congressional committees would:

(1). Permit all equipment to be depreciable by the user in 10 years or less. Only where less than a 10-year life is claimed, would a business have to present justification.

(2). Permit "triple-declining" balance depreciation, which means that, for example, a machine tool depreciated on a 10-year-life basis could be depreciated 30% of cost in the first year, 30% of the remaining balance in the second year, and so on. Thus a business could recover 51% of cost in two years and 83% within five years.

(3). Recognize the fact of the constantly rising cost of equipment through inflation. An investment allowance is a European device often used to take into account the fact of inflation. In England, in addition to fast depreciation rates, the purchaser of equipment is entitled in the first year of acquisition to a further deduction of 20% of cost and on machine tools this becomes 30%.

(4). Application of accelerated depreciation rates for used, as well as for new, equipment. This recommendation would permit small businesses to accumulate needed capital. Whether or not it would help accelerate the greatest possible acquisition of the newest and most efficient machinery by business is difficult to prove either way.

The Senate committee felt there was little danger an accelerated depreciation schedule would result in substantial tax losses. Its report stated:

"Perhaps this will lead some readers to assume that the adoption of depreciation methods to eliminate this capital consumption would result in a loss of $2 billion to $3 billion. Your Committee is firmly convinced that any such assumption would be grossly in error. . . . It is doubtful that there would be any loss in the second year after such liberalization and perhaps none in the first. In the third and fourth years, revenues should be larger."

Dan Throop Smith, Harvard Business School professor and former tax adviser to the Treasury, sums up the need for more realistic depreciation allowances as follows:

" 'It is axiomatic that the sooner a capital investment can be recovered the more likely it is to be undertaken and the more easy to be refinanced. Thus tax laws which facilitate faster capital recovery, are generally preferable on grounds of economic policy to those which defer it, since capital investment in the long run is the basis for greater productivity of labor and higher standards of living'."

Not only a liberal Democratic Senator Morse comprehends our nation's problem in ownership of $95 billion of obsolete machinery. A liberal Republican Governor Nelson Rockefeller has stated the problem throughout the length and breadth of the country.

Governor Rockefeller points out the indisputable truth that there is a direct relationship between the rate of capital investment and the rate of economic growth. It is "a startling fact," he says, "that the country's stock of plant and equipment has been progressively growing older the last 50 years. While other nations have been modernizing, we have been producing with facilities that each year are about three-tenths of one percent less modern than in previous years."

The Governor observed that, with an annual capital investment rate of 16% of Gross National Product—the value of total output of goods and services—the U. S. postwar growth rate has averaged close to four percent.

Japan has annually invested more than 25% of GNP, pushing its economic growth rate to 8½%. West Germany, investing at the rate of 20½%, has increased its growth rate to eight percent, and the Soviet Union, with a 25% investment rate, has maintained a six percent growth rate.

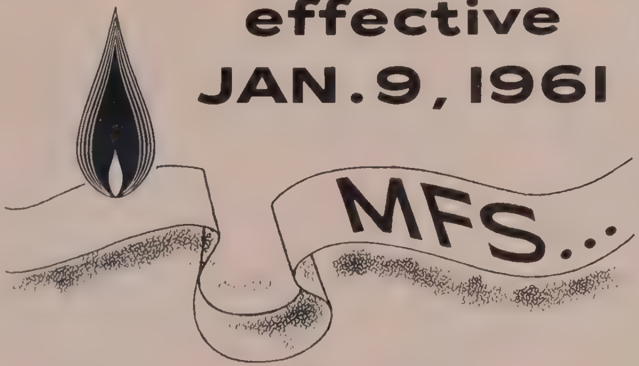
It is safe to say that, if it had not been for the war-induced 60-month's amortization in the early 1940s, and again in the 1950s, the U. S., industrial plant would be hopelessly obsolete and inadequate. By 1959, the cash flow from five-year amortization had about stopped.

Governor Rockefeller has stated that change in the U. S. depreciation policies, through legislation, is imperative for the economic growth of the U. S. We cannot remain one of the most backward countries insofar as depreciation policies are concerned, without paying the price of progressive decline in world economic power and influence.

The Kennedy Administration has no choice in the matter of depreciation but to overhaul depreciation policies *if* it is to achieve any substantial part of its stated objectives. Congress appears ready to move, it now awaits only the New Administration's lead.

Machine tool shares would be outstanding beneficiaries of a more realistic depreciation policy.

effective
JAN. 9, 1961



NEWEST SYMBOL ON THE NEW YORK STOCK EXCHANGE

MFS . . . ticker symbol for Mountain Fuel Supply Company common stock, admitted to trading January 9, 1961, on the New York Stock Exchange. Organized in 1935, Mountain Fuel Supply Company produces, transports, and distributes natural gas, and now serves more than 172,000 customers in Utah and southwestern Wyoming.

MOUNTAIN FUEL SUPPLY COMPANY
180 East 1st South Street
Salt Lake City 10, Utah

THE DAYTON POWER AND LIGHT COMPANY
DAYTON, OHIO
153rd Common Dividend

The Board of Directors has declared a regular quarterly dividend of 60c per share on the Common Stock of the Company, payable on December 1, 1960 to stockholders of record at the close of business on November 14, 1960.

GEORGE SELLERS, Secretary
November 4, 1960

Interlake Iron
DIVIDENDS IN 1960

In 1960 Interlake Iron Corporation, Cleveland, paid dividends totaling $1.60 per share on its common stock. This compares with dividends totaling $1.40 in 1959.

Vice President & Treas.

Maker of Iron and Ferroalloys

CHESSIE'S NEW YEAR REPORT:

Chessie, with a good story to tell, once again is the only railroad to report on the year past to its shareowners and the public on the first working day of the New Year

$42 MILLION NET INCOME

C&O's net income in 1960 was $42 million, equal to $5.15 a common share. This was a healthy 12 per cent of gross revenues, despite generally higher costs. Working capital of $63 million reached a new high for the third straight year, and the railroad was kept in tip-top physical condition.

C&O shareowners for the fourth consecutive year received a $4 annual dividend. And Chessie employees received the highest average wage ever.

C&O "Dividends" for B&O Shareowners

The first successful steps were taken in 1960 toward an event of historic significance — affiliation as a step to full merger as promptly as possible of the C&O and Baltimore and Ohio Railroad.

A majority of B&O shares — 55 per cent — were assented at year end to C&O's stock exchange offer. C&O's board of directors, considering that C&O had obtained this majority, and in the light of numerous requests from B&O shareowners, took these actions:

- So that assenting B&O shareowners might begin enjoying some of the prospective benefits of being C&O shareowners, the C&O will, effective January 1, 1961, accrue the difference between C&O's common dividend (currently $4) and B&O's common dividend (currently 60 cents), after applying the exchange ratio.
- In order to give all B&O shareowners an opportunity to participate, further acceptances will be received through *February 2*.
- Elected that the exchange offer will become binding on C&O so long as the majority of B&O shares are assented at the close of a thirty-day withdrawal period, also ending February 2.

This dividend accrual by C&O would be for one year, but could be extended by C&O's Board. It is subject to the approval of the Interstate Commerce Commission and C&O shareowners. C&O has applied to the ICC for approval. If and when the ICC approves, actual payment will take place just as quickly as ICC authorization becomes effective and the exchange is made.

The B&O-C&O system will be America's second largest in revenues, with outstanding potential for growth. The public interest, so dependent on sound transportation, will be notably served by affiliation and merger.

Walter J Tuohy
President

Chesapeake and Ohio Railway

TERMINAL TOWER • CLEVELAND 1, OHIO

ST. LOUIS SOCIETY'S REGIONAL CONVENTION

by Warren Burns

THE NEW SPIRIT OF ST. LOUIS was dramatically exemplified in the closing weeks of 1960 when 342 Financial Analysts attended the Regional Convention in that city, a Convention sponsored and astutely run by *The St. Louis Society of Financial Analysts*. All but three of the twenty-five Financial Analysts Societies were represented.

Speakers, business forums, and well-planned field trips in and around the environs of this Mississippi "settlement," carved out of the wilderness in 1764 by a tiny band of French pioneers led by Pierre Laclede, high-lighted the three-day meeting.

Then, too, the happy coincidence of the "Beauticians Trade Show" did—we must frankly admit—add a certain fillip to an already industrially star-studded show. In fact, as gorgeous models of the *haut monde* paraded past the Analysts' registration desk and along the corridor of Convention exhibits, en route to their own exhibit hall, profound analytical comments were as varied as the hair styles. Contoured coiffures ran the rainbow gamut of magic magenta, captivating chartreuse (green if you please), striking sea blue and sparkling white. But even this failed to prevent the Analysts from making their appointed daily rounds.

And in making the rounds of luncheons, dinners, business forums and field trips, Analysts

—saw Monsanto Chemical Co.'s vast administrative headquarters and heard words of welcome from the firm's Charles Allen Thomas, board chairman; Charles H. Sommer, president; and Irving C. Smith, vice president.

—were told that in 1961 the prospects are for "a steady non-inflationary increase in Gross National Product and personal income." The speaker was Dr. Merle T. Welshans, professor of finance at the Graduate School of Business Administration, St. Louis.

—heard about fascinating predictions and vast potentials of merchandise and services to be handled by automatic vending machines. The forecaster was John L. Wilson, president of Universal Match Corp.

—and had a choice of attending and participating in a total of ten forums and five field trips.

Dr. Welshans, speaking about "Updating the Economic Outlook," paid tribute to the Analysts' courage "in making daily predictions," and then made the following observations:

"The high plateau achieved by the economy represents a striking contrast with the highly publicized weak spots in the economy. We have achieved and maintained a G.N.P. at the annual rate of slightly over one-half trillion dollars for the first time in our history. In addition, personal income has increased during each month of 1960. The difficulties encountered by the steel industry, the automobile industry, and other manufacturers of durables are to be accounted for not so much by economic recession as by a slow and ponderous underlying influence the impact of which we have only begun to feel—that of the age composition of our population.

"Increasing family incomes are simply going to the doctor, the dentist, the scout troop, and to the grocer—and the new car stays on the dealer's lot. The money is spent; it just isn't being placed in traditional channels. . . .

"Declining inventory stocks have accounted for much of the leveling off in production. Through the use of electronic data processing machines business now finds it possible to control more effectively its inventory requirements. Quicker delivery of merchandise by transportation companies and excess capacity on the part of producers makes it safe and easy to acquire needed stocks on short notice.

"However, there is a limit to reduction in inventories before bottlenecks and shortages develop. We are now close to those limits in many areas and it appears that the adjustments in steel inventories has just about been completed. We have been consuming steel at the rate of over 70% of capacity with production running at little over 50% of capacity, a situation that dictates expansion of production if inventories are not to be depleted entirely.

"Among other constructive influences are the prospects of substantial increases in government spending, federal, state, and municipal—and a whole new marketing area abroad, as U. S. products gain increasing acceptance in other countries.

"That record levels of personal income can be achieved in the face of high levels of unemployment represents both a social and economic problem and is apt to become even more troublesome in the future. Rapid technological growth is inevitably accompanied by technological unemployment. Unemployment among unskilled workers is two to three times as great as among skilled workers.

"It requires much time to adjust to the demands of new skills and to move to new communities where the

CHAIRMEN AND REGIONAL CONVENTION COMMITTEE MEMBERS. Standing, left to right—Tom S. Eakin, Jr., Kenneth Penzler, David H. Morey, co-chairman Carl L. A. Beckers, general chairman; Edward J. Lambur, Jr.; Edward F. Sanders, Morton Clifford, Jefferson Miller, James J. O'Brien, and Frank X Keaney Seated, left to right—Albert W. Winter, J Marion Engler, assistant to chairman; George R. Hays, co-chairman and president of The St. Louis Society; Lillian B. Green, convention publicity director, and William Mead. An exceptionally smooth-working team.

ANALYSTS AT ST. LOUIS

EXECUTIVE COMMITTEE MEMBERS of The National Federation of Financial Analysts Societies and members of The St. Louis Society. From left to right, standing—William Mead, Alois T. Bolfing, Robert W. Kohlsdorf, J. Marion Engler, L. Hartley Smith, Hamilton Bolton, Edward J. Lambur, Jr., John J. Maloney, Jr., and Tom S. Eakin, Jr. Seated—Edward Senturia, Harry F. Langenberg, Carl L. A. Beckers, convention chairman; Joseph A. Jennings, executive vice-president of The National Federation; George R. Hays, convention co-chairman and president of The St Louis Society· George M Hansen, Federation's treasurer and executive secretary; Gilbert H. Palmer, and David H. Morey, convention co-chairman. Top decisions with Top Personnel.

KEYNOTE SPEAKER, Dr. Merle T. Welshans, professor of finance, Graduate School of Business Administration, Washington University, St. Louis.

WILLIAM A McDONNELL, board chairman and chief executive officer of The First National Bank of St. Louis, center, presided at a dinner meeting David H. Morey is at left, with Carl L. A. Beckers shaking hands with Mr. McDonnell.

COFFEE BREAK for four members of The St. Louis Society of Financia Analysts From left to right: Robert J. Franklin, George Young, Lyle S Woodcock, Warren Ruediger. Coffee and . . . were supplied by Liberty Loan

KATHLEEN JETT, secretary to The St. Louis Society's Albert W. Winter, and convention assistant, is shown getting some stock ticker pointers from Yates, Heitner & Woods' Robert Greenberg, left, and Michael Kramer. The financial news and stock quotations "corner" was a popular meeting hub throughout the convention.

JOHN W. KELLY, Twin Cities Society, is shown attaching his identification tag as Miss Mildred Dowd gives him his registration kit. Standing at Mr. Kelly's right is Joseph T. Small of The New York Society.

McDONNELL AIRCRAFT'S model of the world, and a miniature nose cone (in which it is anticipated man eventually will go into space) received considerable attention from the Analysts. Here, from left to right, are: Edward Senturia, Harold M. Masius, Alexander R. Thompson, Paul Sperling (the last three all New York Stock Exchange Floor Specialists) and James J. O'Brien, chairman of Convention's Arrangements Committee. Mr. Senturia assembled ten floor specialists for the Convention. (See Floor Specialists' photo elsewhere).

UNIVERSAL MATCH CORPORATION'S John L. Wilson, president and chief executive officer — who addressed a luncheon meeting — is shown, left, with George R. Hays, president of The St Louis Society of Financial Analysts, and co-chairman of the Regional Convention. Circular stairway, background, led to the Press Room.

OPENING SESSION at the St. Louis Regional Convention witnessed a large turnout. Dr. Merle T. Welshans presented the keynote address.

benefits of improved technology are being felt. That such transitions are being made is indicated by the fact that almost 80% of the unemployed this year have remained unemployed for less than fourteen weeks and about 45% of the unemployed for less than five weeks."

Great Future for St. Louis

In his opening remarks at the first Convention session, Co-Chairman Carl L. A. Beckers stated:

"There is more enthusiasm about the future of our area than we have ever had at any time in the past 30 years. And there is much evidence to support this enthusiasm. Our area has always been noted for its strategic location . . . excellent transportation . . . industrial diversification and economic stability . . . abundant raw materials and skilled labor . . . and its steady growth.

"Among our area's highly-prized assets are cheap river barge facilities, vast coal, silica, copper, lead, zinc, and iron ore deposits, and an unlimited and economical supply of water. Seventy-five million gallons of water flows past St. Louis every minute, and it takes only five minutes to supply the entire daily needs of our community.

"The recent discovery of additional mineral resources in the Missouri Ozarks is certain to stimulate further industrial growth. This year, a $17 million project is being completed for the extraction of lead from a deposit discovered in 1957. This promises to sustain Missouri as the largest producer of lead in the nation.

"A $40 million development to mine a very large, new deposit of iron ore is scheduled for production in 1962. With a new $50 million Chrysler plant and substantially expanded Ford and General Motors facilities, St. Louis has become the nation's second largest automotive assembly center, exceeded only by Detroit!

"Metropolitan St. Louis is at the center of the national market and the nation's second largest rail and trucking terminal. We are the world's leading hog market and the No. 1 market for raw furs.

"Our area includes over 3,000 manufacturing plants producing nearly 350 different classes of products. This is the highest diversification of industry in the nation. For all these reasons, St. Louis faces the future with optimism for its stability and its growth potential.

"At the same time, our community has been noted for its conservatism with respect to major community improvements. Now, that picture has changed. In the past five years, more dramatic civic and industrial projects have been proposed and are underway in this area than during any such span of time in our history. Multi-million dollar bond issues have been voted. A massive riverfront redevelopment is under construction. A great downtown civic center, with a new sports stadium, will soon be underway. New commercial and apartment buildings are rising in the central city. Midtown land has been cleared for a $250 million residential, commercial, and light industrial redevelopment.

"The stocks of many St. Louis companies are listed on one exchange or another; most are on the New York exchange. We are proud of this excellent representation. We hope you will be impressed not only with the value of these securities, as a result of your visit, but also of the value of our numerous, strong, unlisted companies as investment possibilities."

Advantages of Automation

Universal Match Corp.'s President Wilson told the Analysts that "one of your colleagues, a few months ago, issued an analysis of why his firm believed automatic merchandising was a certain development." Reasons were summarized as follows:

"(1) Automatic merchandisers can eliminate the salary plus the fringe benefits of a sales clerk, amounting in some areas to $80 or more per week.

"(2) Pilferage will be eliminated. It is shocking to learn, according to this Analyst (and he is correct) how big a dollar volume of small-sized articles are stolen by prospective customers in retail stores each day. Some sales clerks themselves engage in pilferage. All of this can be eliminated by automatic merchandising. (I might add, parenthetically, that the retail merchants of our nation estimate their losses in pilferage as amounting to one to two percent on gross sales).

"(3) The number of hours in the day and the number of days in the week during which sales can be made will be increased by automatic merchandising from 40 hours and a five-day week to 168 hours and a seven-day week.

Delegates to the Regional Convention of the St. Louis Society of Financial Analysts, on tour of the Chrysler Corporation's St. Louis assembly plant, visited the nearby Frisco Railroad marshaling yard to inspect new three-decker automobile transport car introduced by Frisco recently. Group in foreground includes, left to right: Frank Keaney, G. H. Walker & Co.; Jack Gilliland, vice president traffic, industrial division, Frisco Railroad; Haworth Hoch, secretary, McCourtney-Breckenridge & Co., St. Louis; and Arvid Jouppi, stockholder relations representative of Chrysler Corporation, Detroit.

"In other words, like most of the automation and automated equipment which has increasingly dominated our industrial economy in recent years, the stimulus for automatic merchandising is economic. In our modern society, *time is money*. On the one hand, the *time* that *people* must be involved in performing an operation *costs* money. On the other hand, the *time* that *a selling unit* can be sustained in operation earns money."

And, expanding about the potential of his company's currency changer, Mr. Wilson said: "we expect to produce about 5,000 of our paper and coin currency units in 1961. Some of these will be incorporated in currency changers, some in ticket-issuing equipment, and some in automatic merchandisers. The precise 'mix' has not yet been determined."

Tom Collins: Good as His Name

The final general meeting speaker was Tom Collins, publicity director of the City National Bank and Trust Co. of Kansas City, Missouri. And as the audience listened, roared with laughter twice a minute, and tried to remember just a few of the gentle quips, (many at the "expense" of Financial Analysts) it could have been the consensus that Speaker Collins was cast in the same mold as the legendary humorist Robert Benchley.

A TYPICAL FIELD TRIP

This writer was among the Financial Analysts who went on the Chrysler Corporation — Anheuser-Busch Field Trip; and the first stop was Chrysler's modern, architecturally beautiful assembly plant, the first of its kind to turn out four different cars—in many different colors—simultaneously.

And indicative of the size and production (assembly) scope of this plant are the following facts:

Its 1,379,000 square feet of manufacturing space is equal to 36 football fields.

More than 4,000 people are employed at the plant, producing Valiant, Plymouth and Dodge Dart cars.

The plant contains almost 9.5 miles of overhead and floor-level conveyors.

There are 28½ miles of paint lines running between the Paint Mix building and the main Manufacturing building.

Annual payroll at the plant is approximately $20,000,000.

The amount of wiring used in the plant is enough to equip all buildings, stores and industry in a city of approximately 20,000 persons.

In addition to the rigorous inspections made at 75 quality check points during production, the plant has its own completely equipped standards laboratory for testing metals, chemicals, rubber parts, fuel and other materials.

Design capacity of the plant is 60 cars per hour. (960 cars can be produced each day on two eight-hour shifts.)

While touring Chrysler Corporation's new vast St. Louis assembly plant, E. C. Shawe, plant manager, was asked "just what is the 'finishing touch' as your cars roll off the assembly line?" Guesses, from assembled Analysts, ranged from one end of an automobile to the other. But it's neither the front bumper, windshield, front doors, headlights, wheel caps, etc., etc. Finally, Mr. Shawe provided the answer:

The front seat

Piggyback: Triple-Decker

Touring the Chrysler plant with the Analysts was J. E. Gilliland, vice president of the St. Louis-San Francisco Railroad. Asked by this writer what his interest in the plant was, he explained that his railroad has built a triple-decker flat car which can carry 12 standard or 15 compact automobiles.

And indicative of the importance of this innovation is the fact that the rails (other railroads have placed orders for triple deckers) expect to regain most of the revenue lost to the trucking industry. In fact, from all available evidence, it appears as if the rails have already regained a large percentage of the truck and water transportation that they had practically lost.

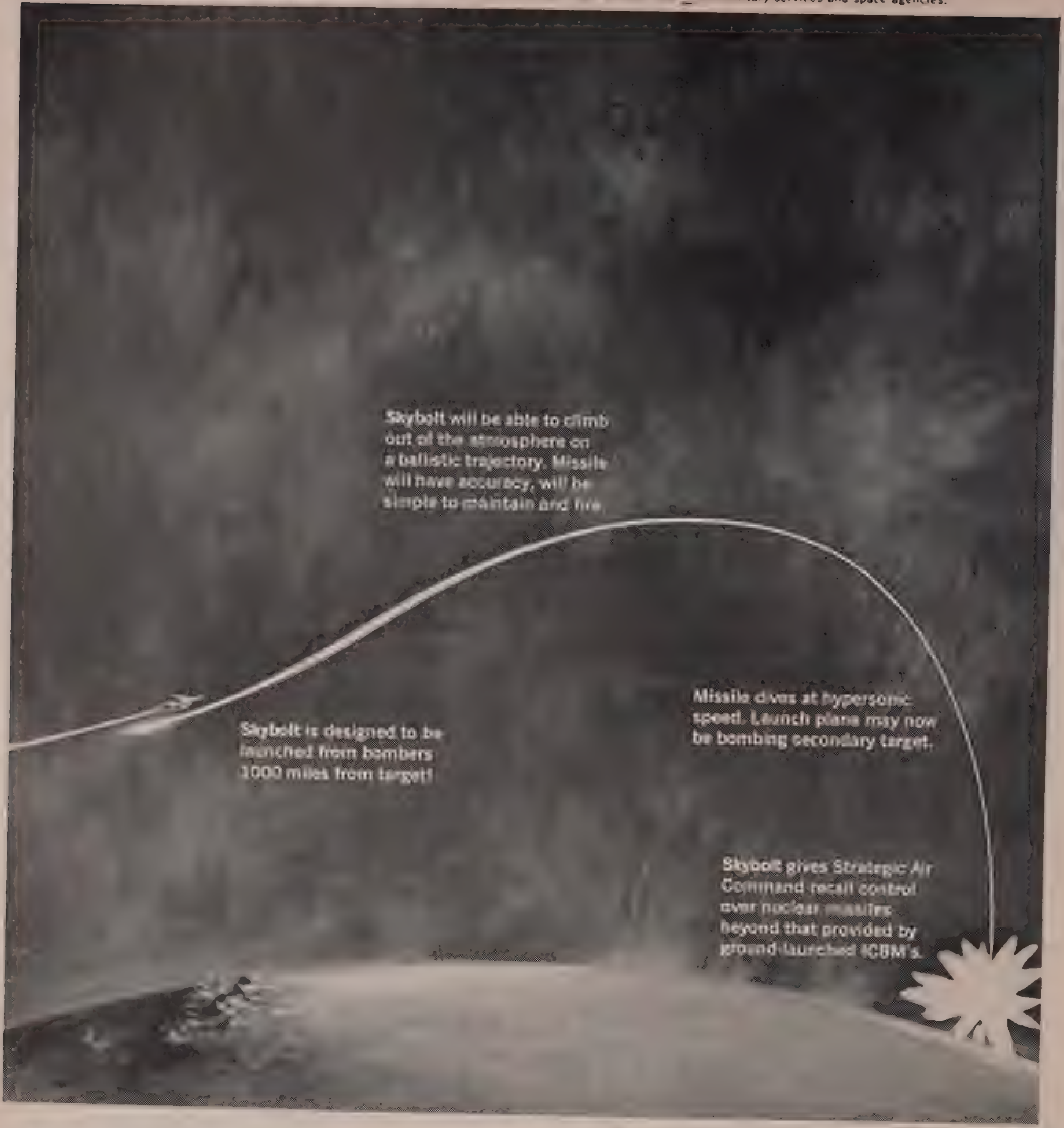
The second half of this particular trip was handled by the officials and staff of Anheuser-Busch and included a tour (on auto-trains, this writer being on the "Michelob Special") of Grant's Farm — a show place of St. Louis and home of August A. Busch, board chairman and president. It was here that Ulysses S. Grant, Civil War general and eighteenth President of the United States, was born.

Following a luncheon in the estate's oldest German-type building, where we were surrounded by ancient hunting wagons and sleighs (and provided with tall glasses of Budweiser and Busch Bavarian), the Analysts then toured the main plant of Anheuser-Busch, the nation's largest brewers.

Along to make the trip both interesting and informative was the brewery's Reid McCrum, a most genial and keen-sighted official who holds the dual title of treasurer of Anheuser-Busch *and* The St. Louis Cardinals. (Through a subsidiary company, this famed baseball club is owned by the brewery). And from unsolicited reports it is evident that both the company and the baseball club are outstanding assets to the city of St. Louis. Mr. McCrum informed us that he teaches a course in finance at St. Louis University and uses *The Financial Analysts Journal* is his classes.

Haworth F. Hoch, of McCourtney-Breckenridge & Co., was trip chairman. (See his account in Trip Section).

One of a series of advertisements in the public interest to show how Douglas works with all our military services and space agencies.



Skybolt will be able to climb out of the atmosphere on a ballistic trajectory. Missile will have accuracy, will be simple to maintain and fire.

Skybolt is designed to be launched from bombers 1000 miles from target!

Missile dives at hypersonic speed. Launch plane may now be bombing secondary target.

Skybolt gives Strategic Air Command recall control over nuclear missiles beyond that provided by ground-launched ICBM's.

New Air Force Douglas Skybolt will extend role of manned aircraft in Space Age defense

Now under development, this new air-to-ground missile of nuclear capability could add years of usefulness to U.S. Air Force B-52s and the Royal Air Force Vulcan bombers. Four Skybolts can be launched from one B-52 at widely divergent targets. And since the missiles will be released as much as 1000 miles from target, the bombers carrying them will be practically invulnerable to attack.

DOUGLAS

MISSILE AND SPACE SYSTEMS • MILITARY AIRCRAFT •
DC-8 JETLINERS • TRANSPORT AIRCRAFT •
ANTI-SUBMARINE SYSTEMS • AIRCOMB® •
GROUND SUPPORT EQUIPMENT

CONVENTION BUSINESS FORUMS

ELECTRIC POWER

Chairman: Walter W. Ainsworth
Metropolitan St. Louis Co.

Investor Relations Program

E. H. Dixon, President
Middle South Utilities, Inc.

It is said that all companies have some kind of public relations, some good and some bad. We at "Middle South Utilities" feel it is essential for the company to go beyond a minimum effort in our investor relations program for two reasons:

(1). It is a fundamental necessity that stockholders should be kept informed of factors which have a bearing on their investment.

(2). It is estimated that for the 11-year period, 1960 through 1970, construction expenditures of investor-owned utilities will total $52 billion. From 1971 to 1980, an additional $91 billion is expected to be required. During this 21-year period these figures will amount to a staggering $143 billion.

It is estimated that 40% of this 143 billion dollars will be generated internally, through depreciation accruals, retained earnings and deferred taxes. The balance or $85 billion will have to come from the sale of securities.

With this in mind, it seems to me that it is in our own self-interest to make every reasonable effort to create an awareness of, and interest in, our companies on the part of the investing public. In addition to placing periodic reports of progress and earnings in the hands of all of our stockholders, our investor relations program has been broadened to include:

Personal contact during the year through meetings held in various parts of the United States and Canada. As an example, in New York City all stockholders living within 90 miles of New York City are invited to a meeting where officers speak with reference to the company's progress. Meetings were also held in Boston, Chicago, Los Angeles and San Francisco. Recently meetings were held in New Orleans, Little Rock, Arkansas and Jackson, Mississippi. Subsequently, meetings were held in Montreal and Toronto, Canada.

Last year for the first time, arrangements for meetings with stockholders were made in Europe. Meetings were held in France, Italy, Holland, Germany, England, Switzerland and Scotland. In each of the larger countries, where a good many stockholders lived, we covered several larger cities and found these stockholders more than pleased to have us discuss in considerable detail, the operations of our company.

Such contacts have been very worthwhile in fostering a close relationship between our company and the investing public which will be so essential in the years to come.

Effect of Inflation of Costs

Donald S. Kennedy, President
Oklahoma Gas and Electric Co.

"Electric Utilities," like all segments of industry, are faced with the realities of inflation—higher wage rates, fuel prices, equipment and material costs, and transportation costs. It affects capital and operating budgets. Using 1947 to 1949 as a basis, the average rise in our costs are shown in this index:

Electric Utility Cost Index
1947-49 = 100

	Handy-Whitman		OG&E
	Steam Power Plant	Elec. Dist. Plant	Wage Rates
Dec. 1940	63.5	61.0	69
" 1945	72.5	69.0	78
" 1950	123.0	117.0	114
" 1955	151.5	141.5	140
" 1959	185.0	153.0	173

You will observe that these costs have increased from 30%-50% during the past decade and have *doubled or tripled since* 1940. On the other hand, electrical utilities actually have many elements of stability which tend to offset the handicaps of inflation. Some of these economic factors are:

1. Relatively high fixed costs; 2. Low labor ratio;

UNION ELECTRIC CO.'S Hospitality Suite was a popular meeting place during the Convention. Here Walter G. Heren, Union's director of advertising and public relations, second from right, is showing a company advertisement to (from left to right) Tom Collins, publicity director, City National Bank and Trust Co.; Edward N. McCully, economist with Kemper Insurance Companies, Chicago; and E. J. Shapiro, Union's Secretary and Treasurer.

3. Technological improvements; 4. Growth industry; and 5. Fuel cost protection.

Electrical utilities have a very high investment per dollar of sales. Our capital structure reflects this situation and usually follows a good ratio:

Debt	Preferred Stock	Common Stock
50%	15%	35%

We enjoy rather high depreciation charges. Ad valorem taxes rise slowly. Also electric utilities are favored by the economic laws of diminishing costs. Labor costs, though rising, have a cost ratio of less than 20%.

Technological improvements, another area of relative advantage, apply to both capital and operating budgets. Power machinery is constantly being improved and the investment cost per unit of new capacity has a tendency to offset increased cost of new facilities. For example, one of the older generators with 40,000 kilowatts cost $135 per kilowatt while a new generator installed last year generated 240,000 kilowats at a cost of $93 per kilowatt.

The growth of this industry in production and sale of power averages about 9% yearly. It is estimated the production and sale of power in OG&E area will double in 8½ years. Fuel consumption, the major item of operating expense, is expected to be less than 10% for OG&E. Further protection against inflation is provided by a fuel clause adjustment in the rate schedules.

Conclusion: Economic factors of stability are inherent in the electric utility industry and a minimum of disaster from inflation is apparent. Some electric company stocks have outperformed some so-called industrial growth stocks. The Oklahoma Gas and Electric Common has tripled in price in the last 10 years.

Uphill Water Pumping Helps Electricity

J. W. McAfee, President
Union Electric Company

The unique construction of a 50 million dollar *Pumped Water Storage Plant,* located 90 miles south of St. Louis, was described by Mr. McAfee. The plant's capacity will produce 350,000 k.w. and it is to cost about $50 million. The Taum Sauk Plant is a "Pumped Storage" Plant which will use the dual purpose pump generators for (1) pump water from a lower level into the upper reservoir and (2) generating electricity as water is released through them from the upper pool. The dual-purpose machines will be on the shore of the lower reservoir and at the base of a 6,846 foot pipe, through which the water will travel. Vital to the operation is the availability of an adequate supply of low cost off peak power for use in the pumping operation. Pumping is done during the night off peak hours. Electricity is then generated with the stored water during peak demand periods. An important key to economical operations on such a large investment is a high percentage of usage of equipment which the pump-generator affords.

The project is designed to furnish approximately 2,200,000 kilowatt-hours of energy on high load days. The lifting of the water 800 feet to the upper reservoir requires about 400,000 kilowatts. The tunnel connecting the upper reservoir and the power house will extend 6,846 feet or 1.3 miles. The upper reaches of the tunnel will have an average bore, or diameter, of 26 feet—equal to that of the Holland Tunnel under the Hudson River. The lower 1,550 feet will carry a heavy steel liner, 18.5 feet in diameter, to protect the rock cover from outward water pressure of some 400 pounrs per square inch.

The "Taum Sauk" offers additional benefits—some not easily evaluated, though nonetheless very real:

First, Because pumped storage power is quickly available, steam plant spinning reserve can be reduced, with the resultant fuel savings;

Second, Pumping will smooth out the load on the system's steam plants, resulting in a better operation;

Third, By deferral of the purchase of another steam unit for two (2) years or more a better unit will be available since steam generating equipment is steadily being improved.

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FOODS and BEVERAGES

Chairman: *E. J. Costigan, Jr.*
Edward D. Jones & Co.

Meat Packing—in Transition

T. G. Redman, Comptroller
Swift & Company

It was not until the growth of Eastern industrial areas outran the local agricultural capacity to produce meat and other food products, that the Great Plains and the Great Southwest came to fore as outstandingly economical areas in which to produce livestock. Out of this tremendous economic opportunity, grew the meat packing industry. The advantages of large scale operation in this period of the industry were keyed to four factors: development of refrigerated rail transportation; processing efficiency through specialization of labor; movement of livestock from the lowest costing livestock markets; and the effective utilization of by-products both edible and inedible. It was on this foundation that the economics of the American meat industry grew into the 20th century status.

The change is still occurring and at a far more rapid pace than in the period prior to the 20th century. Essentially, the changes in the past quarter century were: the building of all-weather highways and truck transport—no longer were farmers confined to sometimes remote terminal markets; refrigerated trucks reduced the dependency of the livestock industry upon rail centers; new and improved techniques of market communications to the public; and the rapid demise of the small neighborhood grocery and meat markets and the even more rapid growth of the supermarket.

All of these changes have considerably reduced the amount of time the American housewife spends in preparation of the family meals. A few years ago, it took 5½ hours out of her day to prepare the family meals, compared with 90 minutes today. For this service, an increasing number of homemakers are ready, willing, and able to pay. On the horizon is even more convenience. The pre-cooked, frozen, complete meal that can be made to sell in quantities from 2 to 10. Dishes from the world's most famous restaurants. Frozen picnic packs with their own heating units. More retail sales at night and on Sundays via the vending machines. All of these things are clearly in sight, or, are already letting their impact being felt. Looking further ahead, will undoubtedly be dramatic developments in preservation and storage of foods. It is possible that a means will be found for reduction of fresh meats to fibers of uniform size which can be reconstituted into fresh meat products of uniform tenderness and shape.

The elements of change or transition in the economic functioning of the industry have meant that large scale meat packers have had sizable adjustments to make. Primarily, the large scale meat packers have undertaken five lines of action: diversification; moving back to the country in order to have first-hand sources of livestock; shortening their distribution channels; developing better technology; and, striving harder than ever to improve efficiency and reduce costs.

Brewing in the Next Decade

Joseph Griesedieck, President
Falstaff Brewing Corp.

Mr. Griesedieck pointed out that brewers are genuinely excited about the nineteen sixties . . . "a long hoped-for turning point (in sales) for the industry." He noted that industry sales gained only 5 million barrels in the past decade, and that during that period, about 200 breweries went out of business or were involved in mergers—with the result that fewer breweries were producing more beer.

Noting that the prime market for malt beverages is among the 21 to 40 age group, Mr. Griesedieck pointed out that, although this group decreased in numbers some 1% between 1947 and 1957, it is expected to increase by 15% between 1957 and 1970, with an added increase of 37% anticipated between 1970 and 1980.

Referring to charts from Roper and Crossley Surveys, Mr. Griesedieck pointed out that heaviest consumers of beer appear to be among industrial workers, truck drivers, young couples on budgets, and in relation to the occasions—the more formal the occasion, the less beer is deemed appropriate and acceptable. Adding to the problem, he noted, is the fact that millions of Americans are climbing the income ladder, becoming better educated, and more conscious of social status.

To overcome this problem, Mr. Griesedieck said the leading brewing firms in the country, working in conjunction with the United States Brewers Foundation, are aggressively pursuing advertising and public relations programs designed to improve the image of beer and to stimulate and widen its acceptance.

In conclusion, Mr. Griesedieck stated, that for his industry, adaptability will be the key to success. Although the brewing business has its roots in tradition, he pointed out that modern brewers are studying all facets of brewing and packaging technology as well as management methods, in meeting the challenge of the years ahead.

Eating Habits and Ready-to-Serve Foods

Gordon Ellis, Vice President
Pet Milk Co.

The growth rate for ready-to-serve and other "convenience" food products will be more than double the growth rate of the food industry in general, predicted Mr. Ellis.

Mr. Ellis pointed out that the market for so-called "convenience" foods—both those which are ready-to-serve and those which have been processed to the point where they require very little kitchen preparation—has been expanding faster than the market for foods generally during the past several years.

Mr. Ellis emphasized that the time-saving and added food values which convenience foods provide have led to their increasing acceptance, as well as such economic factors as higher consumer purchasing power and more working wives.

With such trends at work, convenience foods have a vast group of consumers still to be reached. He pointed out, for example, that an estimated 40% of American homes still rarely use frozen food products at all, and only a very small proportion use them on anything approaching a daily basis.

Pet Milk Company will spend twice as much on research and product development this year as compared to a year ago, and further increases are expected in the years to come. Mr. Ellis mentioned great possibilities for "freeze-dried" meats and food stuffs. Steaks, for example, are said to become very light weight, to keep for years without refrigeration, and are ready to eat or cook merely by adding water, and are said to retain their original flavor to an extent rarely obtained through older drying methods. The future for "convenience" foods, according to Mr. Ellis is certain to be impressive.

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THE SHOE INDUSTRY

Chairman: Alois T. Bolfing
Transit Casualty Company

Henry H. Rand, president, International Shoe Co., speaking on "Meeting Changing Conditions," stated that the shoe industry is in step with the changes in the economy coming about from scientific development. Since the end of World War II there have been tremendous changes in styling and in types of materials introduced by the industry. Shoes today are lighter, more comfortable, more durable, and better looking all as a result of research.

Among the greatest developments coming from the laboratories have been the materials which go into today's shoes. There are on the market materials that literally breathe in summer and insulate in winter. Leathers have been developed and are currently being tanned, that will never lose their shine. Out of the test tubes are coming new and exciting synthetics — like nylon suede—that have the look and feel of costly buck, that actually wear better, and can even be washed in a washing machine. In addition to the "immortal sole," which has been wear-tested up to 70,000 miles of normal walking, new processes of treating leather have been developed and tests show that such treated leathers are almost eight times more resistant to scuffing and abrasion than anything known before.

Scientific advance has also brought about numerous changes in managerial techniques in the shoe industry. Of particular significance are the electronic computers, which are helping run the industry and its factories more efficiently and economically. These remarkable machines find particular use in the fields of inventory controls and merchandizing records, which are vitally important in an industry which may use well over 15,000 different materials, have about 7,000 stock numbers and nearly 200,000 sizes. Useful information on this mass of data is now available completely up-to-date each week, which is a tremendous advantage in control and planning.

Research and development have improved operating efficiency. In each of the last two years the industry has sold over 600,000,000 pairs. Yet while sales and earnings have shown steady improvement, the industry has at the same time actually reduced prices. The average factory value of shoes produced in this country ten years ago was $3.68. In 1958—the latest year for which there are complete records — the average factory value of shoes produced was 13¢ less per pair. Thus, not only have rising costs been offset by increased efficiency, but the price to the consumer has actually been reduced, thus broadening the market in the best capitalistic tradition.

Joseph S. Stern, Sr., chairman, The United States Shoe Corp., chose for his subject "The Next Step In Shoes." Mr. Stern stated that one of the dominant trends in the industry is the merging of the family owned businesses into publicly held companies. In 1950 there were 957 shoe manufacturers, and today there are only 732. One of the principal reasons for this trend is consumer reliance on brand names for styling and quality.

The industry is also concentrating successfully on making the consuming public more style conscious. Just as a number of years ago the automobile industry turned to the fashion image by stressing style, so the shoe industry has created, and is creating more and more each year, a great fashion image, not only in women's shoes but also in men's.

With the total demand for shoes increasing and with the number of manufacturers constantly decreasing it becomes rather obvious that the increased sales will go to those that remain in business.

What is happening in the manufacturing of shoes is also happening in the retailing end. Expansion in the retail field is by major manufacturers, well-established chains, department stores and mail-order houses, and this trend is accelerating because of the importance of advertising expenditures to promote brand names, and the necessity for good merchandising advice and financial help.

En Route For A Tour of International Shoe Co.'s St. Louis Plant, Mrs. David H. Morey, right, leads Financial Analysts' wives into a chartered bus. Others, from left to right, are: Mrs. David S. Loveland; Mrs. Carl L. A. Beckers; and Mrs. George R. Hays. In background is B. Everett Gray, Manager of International Shoe's Research and Development Division.

In short, while the whole market is growing through population gains and the increased emphasis on style factors, that market will be shared by fewer and fewer companies which can demonstrate their superior efficiency in manufacturing and merchandising.

Robert C. Erb, president, Melville Shoe Corp., spoke next on "Shoes in a Marketing Revolution." Mr. Erb summarized the basic factors affecting shoes as follows: (1) the over-all growth of population; (2) radically differing rates of growth in specific age groups; (3) geographic shifts of population; (4) high mobility of population, due to high ownership of automobiles; (5) increased personal income in all sections of the country; (6) increased size of families; (7) universal importance of style factors.

Since the population will increase between 15% and 17% in the next ten years, we can confidently expect shoe production to increase at least that much. It will probably increase more than 17% because the biggest increase in population is going to come in the age groups which are by far the best customers for shoes, namely, teenagers and young adults who buy more pairs per year than the remainder of the population. The number of persons in the 15 to 24 age group will increase 48% in the next ten years. When you add to this the continuing increase in the below age 15 group—another group with high per capita shoe consumption—you have a basic factor which tends to push shoes ahead at a faster pace than total population growth.

Geographically, the more rapid rates of growth have taken place in the far West and the South, but there is another geographic variation of even more significance for shoe marketing. This is the continued and rapid growth of metropolitan areas. Most of the last decade's growth of 28 millions occurred in the principal metropolitan areas—areas of 100,000 or more people—and nearly all of the increase has been in the suburban sections of those areas. This is a powerful factor affecting both the character of shoes and the marketing of them. Suburban living obviously calls for more casual types of shoes, and, as the suburbs reach farther and farther out from central cities, it calls for new and more convenient retail outlets (a need which has been met by thousands of shopping center and highway stores). During the past ten years, about 4,500 shopping centers have been opened. Four thousand two-hundred of these are small or neighborhood centers, but shoes are sold in most of them by somebody, not necessarily shoe stores. However, 300 are large centers, in all of which you will find two or more shoe stores. These developments are based on what has become today's leading shopping motivation—convenience. Carrying this theme a step further, the majority of shopping center shoe stores cater to the entire family. Of the 78 shoe stores which Melville Shoe Corp. is opening in 1960, 31 are in shopping centers, 45 are highway stores, and only two are in city locations.

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CHEMICALS and DRUGS

Chairman: William Witherspoon
Witherspoon Investment Council

Participants:

Dr. Nat C. Robertson, V. Pres., Research & Development
Spencer Chemical Co.

Marshall E. Young, Vice President and General Manager
Overseas Division, Monsanto Chemical Co.

Gavin K. MacBain, Treasurer
Bristol Myers Co.

Dr. Robertson, in his discussion of "The Areas of Future Expansion in the Chemical Industry" pointed out that in the past ten years the chemical industry has grown by 120% and that this growth compares with 51% for all industry, 52% for petroleum, 9% for steel, 58% for paper, and 94% for electrical equipment. He cited three possible reasons for this growth in the chemical industry: (1) The products of the chemical industry have displaced existing products and that the growing use of petrochemicals is an outstanding example of this trend. (2) Inasmuch as only 10% of the chemical industry's output goes to government agencies or is exported, the huge population growth experienced for the past ten years has contributed largely to the growth in the chemical industry. (3) the rising standard of living in the United States has also contributed substantially to the chemical industry growth.

Having summarized the past record of growth in the chemical industry, Dr. Robertson said "I think we can say very safely that every segment of the industry is going to have to work a great deal harder and more effectively if future growth is nearly as rapid as that of the past two decades." He then cited six problems that the industry currently faces: (1) Over capacity exists in nearly every major chemical field. This has resulted in more readily available technology which in turn has enabled newcomers into the chemical field to build production facilities, the development of alternate production processes, a history of substantial growth and attractive profits, and surplus funds have been available to concerns wishing to expand into this industry. (2) A cost-price squeeze has resulted from this over-capacity and improvements in manufacturing efficiency have simply not been great enough to close the gap. (3) Non-chemical companies will continue to enter the chemical market place and thereby further aggravate the over-capacity problem. (4) Foreign chemical markets are being increasingly satisfied by foreign production. (5) Whereas synthetic chemicals have been replacing natural chemical during the past 20 years, the competition will now be between one chemical and a number of others. (6) Increased government regulations will add to the cost of developing new products in many areas of the chemical industry.

Dr. Robertson then cited three ways in which the chemical industry might overcome this burden: (1) Through an ever increasing emphasis upon integration toward the ultimate consumer. (2) Increased effort may be directed towards establishing proprietary protected positions in areas of importance in the chemical industry. (3) We shall see more joint ventures in which each partner contributes technical and marketing skills in complementary fields.

In concluding his remarks, Dr. Robertson cited the fact that chemical science has established the fact that energy concentrates at the interface between liquids and gases, solids and liquids, solids and solids, etc. Using this as an illustration, he concluded that the chemical industry may be doing likewise and that "we should look for most rapid progress in those enterprises which have placed themselves in a position to capitalize on this energetic interaction. We can already see a number of good examples; chemistry and adhesion and abrasion—Minnesota Mining; chemistry and electronics—Texas Instruments; chemistry and optics—Polaroid; chemistry and propulsion—Thiokol and Aerojet; chemistry and ceramics—Corning Glass."

Mr. Young spoke on the subject of "How Best to Participate in Foreign Markets in the Chemical Industry." As background, he pointed out that private direct investment abroad by United States companies has grown from $21 billion in 1950 to about $30 billion in 1959 and that these investments are responsible for the manufacture of approximately $30 billion per year of U. S. product with profits of more than $3 billion in 1959.

Monsanto Chemical has expanded its gross assets in foreign areas, Mr. Young explained, even more rapidly than this over-all total, from $72 million in 1953 to $228 million in 1959 or an increase of 217%. He said that Monsanto had been an exporter of its products since the early days of its existence and that it made its first overseas investment in the United Kingdom in 1920. He further pointed out that this combination of an aggressive export market program coupled with an integrated overseas investment program is the answer of Monsanto to the question which has been posed.

With regard to the export marketing phase of Monsanto's business, the company has a network of 88 fully indoctrinated and aggressive sales agents representing it in virtually every major buying center in the world. In addition to this, Mr. Young said that the company also has its own personnel living in Europe, Latin America, and the Far East to assist wherever possible.

Concerning investment abroad, he said that Monsanto has developed certain principles or guide posts and cited five of them; (1) one doesn't go shopping around the world because it happens to be fashionable. (2) Monsanto exports United States made products as long as possible. (3) Monsanto makes certain that capital markets overseas meet the standard for domestic capital reqiurements. (4) The proposed foreign venture must fit all aspects of the local environment and (5) the country's political and economic history must reveal adequate stability. With regard to point number two, Mr. Young said that there are only two basic reasons for making overseas investment (a) to protect a market which has been developed through intensive export marketing activities and (b) to enter a market which is not attainable in any other way.

It has been the practice of Monsanto to invest relatively small amounts of capital in the United Kingdom-Europe area and to gain partial equity interests through technical know-how. One third of the common stock of Monsanto Chemical Limited has been owned by the public since immediately after World War II. In its French investment, cash has been held at a very minimum and the bulk of Monsanto's investment has been in the form of manufacturing, selling and administrative techniques. In Italy, Monsanto holds only 40% of the equity shares in this company. On the other hand, Monsanto took another approach in Spain by investing in machinery and equipment as well as know-how which gave the company the opportunity to be the first manufacturer of polystyrene in that country. In the Western Hemisphere, however, all of Monsanto's interests are in wholly owned subsidiaries. In the Asia-Pacific group, Monsanto owns a 50% interest in Japan's Mitsubishi Monsanto obtained wholly in exchange for know-how, and in Australia Monsanto owns a 77% interest through its British company.

Mr. Young pointed out that Monsanto's overseas investments have become an important factor in the total life of the company amounting to about 17% of total assets and about 20% of total sales.

After very recently returning from Europe, Mr. Young spoke highly of the European Common Market and said that there has been talk of some consolidation between the Common Market and the "Outer Seven"

TEN NEW YORK STOCK EXCHANGE Floor Specialists, each of whom trades one or more St. Louis-based companies. They are, from left to right: standing—Glen S. Foster, II, A. B. Doyle, E. N. Potter, Welles Murphey, Harold M. Masius, and Paul Sperling; seated—Albert Fried, Clarence Southwood, Alexander Read, and Alexander R. Thompson. The function of these men, of course, is to maintain a fair and orderly market in the stocks in which they specialize.

group of countries but no substantial progress has been made in this area to date. In this connection, it is to be noted that through Monsanto's investments in the United Kingdom-European area, the company is well placed with a foot in both the Common Market and the Outer Seven.

Mr. MacBain spoke on "The Importance of Proprietaries to the Drug Industry" and called attention to the general belief some 12 to 15 years ago that the growth possibilities in proprietaries, which include non-prescription drugs and specialty cosmetics, was very limited. He then looked at the record over this period and noted that (1) there has been a stable growth in sales, earnings, and product prices. (2) Profit margins are at a good level. (3) Pharmaceuticals require considerable less invested capital than ethical drugs.

Mr. MacBain pointed out that Bristol Myers sales increased four times during the past ten years and three times during the past five years. The sale of aspirin increased three times over the past ten years while the sale of deodorants, toothpaste, and hair products has increased phenomenally. He particularly called attention to hair coloring which has had a very spectacular growth in recent years. He also called attention to the fact that sales of proprietary drug companies have shown exceptionally good resistance to downtrends when they have occurred in our economy and that the profit margins of these companies have held at very good levels.

Mr. MacBain said that research is very necessary for proprietary drugs even though ethical drugs require even greater amounts to be spent on research. Nevertheless, he noted that there is less possibility for imitation in the proprietary drugs and political pressures have thus far been less severe.

In looking into the future, Mr. MacBain thinks that the growth in proprietary drugs will be slightly less than the growth established in recent years, but that it will be in the neighborhood of an annual growth rate of about 10% to 15% and that some proprietary drug companies may outperform the ethical companies.

* * * * *

ELECTRICAL and ELECTRONICS

Chairman: Haworth F. Hoch
McCourtney-Breckenridge & Co.

The magic word "Electronics" apparently helped to make this forum one of the most popular at the Regional Convention in St. Louis. The General Electric Co. was represented by H. Brainard Fancher, general manager, semiconductor products department from Syracuse, New York. Mr. Fancher brought home the miracle of electronics as it effected our daily life. The electronics that we all knew as radio and television has been expanded by semiconductor electronics so that the term "electronic industry" must be used in a broad sense.

Functions which traditionally relied on mechanical and electrical methods are now yielding to the greater efficiency and greater reliability of the electronic method or rather the use of electronic circuits for their unique contributions of control and conversion as well as communication.

The ability of devices like the transistor and its sister solid-state components to perform dependably for long periods of time and thus to replace older and larger components is responsible for only a small measure of the continuing enthusiasm among engineers. They also offer a whole new spectrum of capabilities for improving equipment performance and characteristics. These devices also have other desirable attributes of extremely small size, long life, low power drain, and simplicity.

At present, electronics is making its most significant contribution in the area of national defense. Present day speeds and complexities of manned aircraft have forced electronics to do automatically many of the pilots' and navigators' former tasks.

Consumer goods are also feeling the benefits of solid-state electronic circuits. The introduction of the transistorized radio a few years ago was one of the most important marketing achievements in recent years. Solid-state circuits allowed the size of the radio to be reduced.

A solid-state electronic device has just been introduced in the 1960 Valiant. Here silicon rectifiers allow alternating current to be generated rather than the conventional direct current. This results in better performance and greater electrical reliability for the car.

The automatic telephone dial system, which is nearing nation-wide use would be impossible without electronics. Mechanically operated centers in large cities were becoming overloaded and electronic circuits offered the solution. Solid-state computers form the bulwark of the system.

The future of electronics in the communication field was the subject for the portion of the forum given by Donald C. Power, chairman of the board and chief executive officer of General Telephone & Electronics Corp. As recent as 1940 the word "electronics" was not even a part of our vocabulary. The business represented sales of some $500 million with employment of around 70,000. By 1950 sales and revenues had increased to nearly $5 billion and more than 60% of this total represented television and radio sets, service and distribution. During the past ten years the defense phase of electronics increased to a total of nearly $5 billion and the entertainment phase of the industry represented another $5 billion. The third largest segment of the industry that of commercial and industrial electronics is approximately $3 billion annually at the present time. The final segment of the electronics industry is the broadcasting business. Broadcasting revenues are at the $1.5 billion level, more than 300% above the 1950 level. From sales and revenues of $5 billion in 1950, the total for the electronics industry has risen to $14 billion last year. This is nearly a three-fold increase in eleven years.

In the foreseeable future, the telephone company will be able to send practically any kind of information to anyone in any place provided he has telephone service. That will mean not only conversation but also images, whether they might be a photograph or a drawing, and that wide range of information that comes under that handy little name of "data"—a financial summary, an engineering analysis, an inventory report, or perhaps a detailed and understandable description of how to fix your washing machine.

The field of business communication involving electronic data processing is bringing about a new concept of what can be done by this modern miracle. The "memory" devices and "slow-scan video" are examples of electronic techniques which allow compilation of information in a matter of minutes which would have been impossible a few years ago.

As to space communication, the possibilities are limited only by the imagination, and the satellites this country has put in outer space give a suggestion of what lies in store for us. The scientists of General Telephone & Electronics believe that these satellites are the stepping stones to a world-wide communications system which will permit versatile, highly-reliable person-to-person communications despite the great distance involved. They envision a network of satellites circling the earth some 2,000 miles out in space, together with space relay stations 22,000 miles above the earth, providing continued long-range point-to-point communications throughout the world, global television, and reliable radio-telephone contact with manned space ships.

In summary, the potential growth in electronics appears to be unprecedented from the standpoint of:

(1) The introduction of new products and services.

(2) The growth potentials in sales and revenues.

(3) The expansion of companies already in the industry and the entrance of new companies.

(4) The vast number of new applications in commerce, industry, and the home that will be found for electronic equipment and devices.

(5) The increased strength electronics will bring to National Defense.

(6) The increased opportunities for employment and investment.

"The Magic Tomorrow of Electricity" was covered by W. R. Persons, president, Emerson Electric Manufacturing Co. This country is on the verge of another industrial revolution. Electricity and electrical products are going to play a key role, and their part will be accelerated during the coming ten years. This year our total power output is about 575 billion kilowatt-hours, and this is indeed a lot of electricity. But by the end of this century—only 40 years away, our total output is expected to grow to at least 6 trillion kilowatt-hours, and some authorities estimate it as high as 10 trillion. In terms of per capita consumption, at present, total output is nearly 5,000 kilowatt hours per person in the United States. By 1980 it is estimated per capita output will be 12,000 kilowatt-hours.

Only half of this output is being used in industry and for various commercial and public uses. The other half is, and will be continued to be used in the home. Today there are 24 electric motors in the average American home, and before the sixties are over there will be 35. New and different appliances and machines are becoming more available every day. About 136,000 new homes built this year will be heated with electricity—an increase of 22% over last year.

Thermo-electric appliances will either heat or cool, depending on the direction of the current. A refrigerator can become an oven, and a heated blanket for winter nights will keep you cool during the hottest nights of summer. Ultrasonics are expected to be able to do all sorts of wonderful things—from automatically cooking dinner to cleaning your clothes as you walk in front of a machine.

Some fascinating and absolutely fabulous developments have also taken place in industry. Automatic warehousing is accomplished through the use of electronically controlled conveyors and data read-out systems. An eastern steel plant has installed a programmed digital automatic control system to operate a reversing roughing mill. The system is said to eliminate human error. Punched cards contain all information necessary to process an incoming slab.

Recently one manufacturer demonstrated a numerical tape controlled machine to form and bend automobile tail pipes. This machine eliminates the necessity of carrying heavy inventories of large number of different automobile tail pipes. A punched tape is originally made for each individual pipe. When a particular tail pipe is ordered, it is reproduced from the tape. With this system, the punched tape is the only tangible form of inventory—a true flexible form of automation.

Many of the new products being developed will provide the foundations for entire new businesses—not just new products, but new businesses!

We are truly on the edge of an electric wonderland that nobody dared dream about just a few years ago. Electricity is the giant to make these dreams come true.

★ ★ ★ ★ ★

RETAIL TRADE

Chairman: Albert W. Winter
Mercantile Trust Co.

A distinguished panel of three industry leaders addressed the Retail Trade Forum. These were Morton D. May, president of the May Department Stores Co.; Irving Edison, president, Edison Brothers Stores, Inc.; and Crowdus Baker, president, Sears, Roebuck and Co.

Mr. May discussed "The Shopping Center . . . Its Future in the Downtown and Suburban Marketing Centers." He pointed out that some 4,500 shopping centers were generating sales at an estimated annual rate of $45 billion, or about one-fifth total retail sales. These centers, which were forecast to reach 10,000 in number by the end of 1965, fall into three major types: The Neighborhood Center in which a supermarket is the major store, The Community Center dominated by the

Edward S. Wilson, left, president of The New York Society of Security Analysts, is shown talking about the Analysts' April 1961 European field trip with Hamilton Bolton of The Montreal Institute of Investment Analysts, and past president of The National Federation of Financial Analysts Societies.

junior department store, and The Regional Center which contains at least one major department store and covers a trading area of as much as 20 miles, serving at least 100,000 people and providing almost a duplicate of the downtown shopping district as to tenant mix.

In discussing suburban centers, Mr. May confined his remarks primarily to the regional center. He pointed out that the May Company seeks to develop its own centers and expressed a preference for ownership of the facilities as opposed to sale and lease-back which, he stated, was merely a method of financing and not a means of staying out of the real estate business. He stated "In short, we feel that large-scale leasing of fixed assets in the department store business results in the loss of substantial economic benefits in exchange for temporary accounting advantages.

"And even these seem to be disappearing as the investment community becomes increasingly aware that rent paid under a long-term lease is a debt obligation—not unlike mortgage indebtedness—despite the way it is treated in the financial statements."

While many areas of agreement exist between real estate developers and department stores, the approach of the two can be different in a number of respects. Mr. May stated that "First of all, a retailer-developer such as the May Company looks at the center not only from the real estate aspect but also from a long-term merchandising viewpoint. The developer, on the other hand, is often more interested in getting as many national tenants as possible and then building as cheap a center as possible so that he can completely finance out or, at worse, have little equity in the venture." A second difference may arise in connection with the selection of tenants, the real estate developer tending to place the emphasis on national tenants for financing purposes, often overlooking strong regional and local merchants that might be selected if the emphasis were on the long-range merchandising aspects. A third area of difference can be the matter of location, Mr. May pointing out a tendency of developers to locate centers closer to the downtown area than is desirable for a department store with a downtown location.

In turning to a discussion of downtown stores, he expressed a belief in a strong relationship between the downtown store and its branches. The store in the core area being the hub around which branches are built. He pointed out that the downtown area must be converted into one big shopping center, increasing the convenience factor which has made the suburban centers successful and obtaining the benefit from the greater selections available in the downtown stores because of the greater volume of business.

In conclusion, he stated "Intelligent retailers should not neglect or abandon downtown locations. Instead, they should do everything in their power to encourage the revitalization of their cities, as well as modernize their stores without over-investing capital which would make it impossible to cash in on future improvement in volume. Obviously, however, they cannot overlook the rapid progress of the suburban shopping center as a retailing force. I feel we are only beginning to realize the full potential of the shopping center."

Mr. Edison discussed "Our Changing Chain Stores." In pointing out that change was the one dominant trait of chain stores today, he gave a number of examples. In the chain drug store field, there has been an increased emphasis on self-service and size with square foot area increasing from the 3,500 to 4,500 square feet range to upward of 7,500 square feet, all within a period of less than seven years. Similarly, the chain variety store, with broadened and "traded-up" merchandising lines has increased its typical area in five years from approximately 7,500 square feet to upwards of 25,000 square feet. In the shoe chain business, there has been a vigorous development of roadside units. In cafeteria operations, there has been a resurgence of well appointed, well lighted "plush" cafeteria chains. The chain discount house has become a powerful retail force in the past three or four years, store area being upwards of 70,000 square feet.

He pointed out that there have also been changes other than in size including a more widespread use of credit operations, particularly in the chain variety and junior department store fields. He stated that perhaps one of the most dynamic changes in retailing has been the emergence of department stores as multi-unit operations.

Mr. Edison stated that "The entry of department stores into the chain store field is also being accompanied by the entry of chains into the department store field, in this sense: as department stores find they must operate specialized departments in many locations they find also that they encounter new problems. In certain departments, the department stores can do a better job if they invite specialized chains to step in and take care of the operation. This is true to a great extent in the shoe department."

He pointed out the tremendous change in the scope of merchandise lines carried by the various types of retail organizations . . . food chains offering non-food items, including health and beauty items; drug stores handling a wide variety of sundries; variety chains entering other lines and trading up their apparel line and discount houses "selling just about everything." Mr. Edison attributed these sweeping changes to the unprecedented population explosion in the suburbs and our changing mode of living.

"Many years ago the word 'chain' was almost synonymous with 'cut-rate, cheap-jack, pine-board.' Its basic appeal was price. . . . The chain store has become respectable, but I hope it will never forget its origins."

Mr. Baker devoted his attention to "The Future of the Mail Order Business." While speaking on the subject generally, he pointed out that he would approach this subject from the viewpoint of Sears, Roebuck & Co., thus drawing on his career-long experience.

He suggested the term "mail order" was no longer properly descriptive and that it would be more appropriate to think in terms of the "catalog sales business." Underscoring this, he pointed out that last year only about 27% of Sears catalog business was in the form of direct mail order business, the balance coming from catalog sales offices, catalog sales departments in retail stores and from telephone catalog sales departments in retail stores and "mail order" plants. Emphasizing the importance of catalog sales from a volume standpoint, he stated that catalog sales accounted for 21.8% of Sears total net sales in 1959. He indicated that catalog sales offices were Sears means of serving customers in localities which do not have Sears retail stores.

"Just as outlying retail stores and shopping center locations have been part of the retail store operator's efforts to reach or keep up with the changing market, so have catalog sales offices and telephone sales operations been the catalog merchant's way of maintaining or improving his position in the market."

Whereas the catalog sales business has had a reputation for inflexibility, he indicated that in actual practice, it has proven to have a high degree of flexibility and quite able to meet competitive conditions. He attributed a good part of this flexibility factor to the catalog sales office. Through these offices, it is possible to promote on a seasonal basis, to engage in local promotions and to make use of outside salesman in connection with some higher priced items. He indicated a belief that more catalog sales offices would be opened in metropolitan centers. In addition, to "convenient location," they are able to offer the customer a tremendous selection of merchandise, fast delivery service, and the convenience of credit.

He next commented briefly on future trends in the mail order plant operation. He expressed an opinion that benefits from mechanization and automation are just beginning to be realized. These benefits will result from a more expedient disposition of the vast amount of paper work as well as the adaptation of mechanization to merchandise and materials handling. He pointed out that in common with most other businesses, the catalog merchant had been faced with an increasing cost structure.

In conclusion, Mr. Baker stated "We, at Sears, are certainly bullish on the future of catalog selling. It has been a part of our business for almost 75 years. It has been important to Sears in the past; it is important now; and it is important that it grow in the future. We believe that in looking toward the future, catalog selling will continue to play a vital part for Sears as a growing company in a growing economy."

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CONSTRUCTION INDUSTRY

Chairman: Frank X. Keaney
G. H. Walker & Co.

Participants:

Walter E. Hoadley, Jr., Vice President and Treasurer
Armstrong Cork Co.

Howard A. Coleman, Vice Pres. & General Sales Manager
Missouri Portland Cement Co.

W. H. Franklin, Financial Vice President
Caterpillar Tractor Co.

Mr. Hoadley, in discussing building prospects for the '60s, felt that the industry's progress as a whole should be in line with the general economy, with an increase of possibly 35 to 50% over the next 10 years. No one really knows with precision just how large the industry is, especially when the hugh volume of repair and modernization activity is included. He also thought that the new index relating to residential building starts is far more sensitive than the one previously used, and that,

M. DUTTON MOREHOUSE, of The Investment Analysts Society of Chicago, is shown inserting a five-dollar bill into National Rejectors' "Currency Changer." Four quarters are returned, along with four single dollars rolled into a cartridge as shown in the right hand of Arthur Klein. This machine handles only one and five-dollar bills, rejecting all others, as well as any counterfeits. National Rejectors Inc. is a subsidiary of Universal Match Corporation.

accordingly, analysts should be wary of using figures for any one month to indicate a trend. Mr. Hoadley thought that quantitatively speaking, a rough balance between housing supply and demand had been reached, with little prospect of any substantial gain in 1961.

Mr. Coleman, in discussing new trends in the production of cement, and its uses in construction, mentioned that the industry had exhibited a remarkable performance in rehabilitating obsolete equipment and constructing new facilities in the postwar period. His own company has had a complete replacement of its plants in St. Louis and Kansas City. He also stated that the cost of cement rose 10% less than most construction costs between 1946 and 1959.

Mr. Franklin was most optimistic with regard to the long term outlook for the heavy construction equipment industry. He expected the highway program, both on a federal and state basis, to improve. He also mentioned that in addition to highways, the construction of dams, levees, new plants, and subdivisions are also important to his industry. Touching upon the foreign aspects, he noted that his own company's foreign business had increased from 38% of total sales in 1959 to as high as 48% in the third quarter of 1960. (In passing, it might be noted that Caterpillar's sales in Europe had been three times as great for 1959 as they had been in 1953.) Great things could also be expected in underdeveloped South America, inasmuch as sales in that area are but one-sixth the U. S. rate on a per capita basis, as compared to sales in Australia, Canada, and some parts of Europe, where sales on a per capita basis are running 1½ times those in the U. S.

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THE METALS INDUSTRY

Chairman: John F. Hallett
First National Bank in St. Louis

Participants:

Frederick J. Close, Vice President and General Sales Mgr.
Aluminum Company of America

Andrew Fletcher, Chairman of the Board
St. Joseph Lead Co.

Bay E. Estes, Jr., Vice President—Marketing
United States Steel Corp.

A uniform note of optimism for higher sales and earnings and improved metal price levels was sounded by Mr. Close, Mr. Fletcher and Mr. Estes in their talks. All the speakers admitted that they are "taking their lumps" at the present time, with demand for metals, both non-ferrous and ferrous, well below capacities and prices somewhat unsteady. However, all the speakers felt that in the fourth quarter incoming orders should improve, and all were optimistic about the long range future for their respective segments of the metal industries.

There was substantial evidence of a strong competitive situation between aluminum, lead, zinc and steel, where each company is making strong efforts to break into the markets now enjoyed by one of the other two companies. Mr. Close pointed out the substantial increase in use of aluminum in automobiles, particularly the compacts, where the full engine is now often made of aluminum, where increased structural uses are getting into markets for zinc die casts and steel panels. However, all companies are increasingly research oriented and are taking steps to improve products and bring out new ones. For example, the aluminum companies are going into further fabrication, including can manufacture as well as building materials and other lines, while lead and zinc people are coming up with substantial improvements and alloys to improve their hold on the die casting business and find new markets for their products. Mr. Estes of United States Steel called attention to the new super thin steel "foil" which U. S. Steel is bringing out and which they feel will have important new uses in the packaging industry.

Mr. Fletcher pointed out that important steps are being taken to stabilize both production and consumption and prices on an international level, and to establish a satisfactory tariff situation here in this country so that domestic production is not penalized by overall governmental policies on these matters. Mr. Fletcher indicated that the new developments for St. Joseph Lead at Viburnum and Pea Ridge, Mo., offer substantial future benefits to St. Joseph. Both U. S. Steel, Alcoa and St. Joseph Lead expect to continue their major plant expenditures and research outlays. They expressed the opinion that they were going to be increasingly able to compete with lower wage scales abroad and a changing customer inventory pattern at home. In the latter case, they pointed out that with new and faster methods of distribution, smaller customer inventories were in general required.

It was particularly interesting to note that all three speakers felt their employees were increasingly conscious of foreign competition and price levels and the need to keep our costs here competitive at all times.

It seemed to be the general consensus that as far as the metal markets were concerned, the picture was bottoming out at the present time and that operations should pick up moderately over their present levels during the next three to six months, with 1961 being a pretty fair business year.

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NATURAL GAS

Chairman: Malcolm Tait
Bankers Trust Company

Participants:

Richard T. Lyons, President
Union Texas Natural Gas Corp.

Glenn W. Clark, President
Mississippi River Fuel Corp.

Robert W. Otto, Chairman of the Board
Laclede Gas Company

Speaking for the gas producers, Mr. Lyons referred to the tremendous growth that has taken place in the last 15 years, when gas increased its percentage of the energy requirements of the country from 14% to 31%

of the total. Total gas consumption has increased 2½ times during this period. Despite the increased production that has also taken place, he pointed out that the reserve-production ratio has declined from 32 years in 1946 to 21 years presently, adding that to increase industry reserves from 262 trillion cubic feet at the end of 1959 to the estimated required amount of 414 trillion cubic feet by 1970, additions to reserves over the ensuing 11 years must be 180% of additions during the preceding 11 years. In order to accomplish this, producers must receive revenues adequate to stimulate them to explore for and develop reserves of the magnitude rquired. He pointed out that the producer has no assurance of finding any gas when he does exploratory drilling and he also referred to the sharp increase in drilling costs which have exceeded increases in both the wholesale price index and construction cost index. Despite the fact that the producer is not a public utility, he is subject to federal regulation.

Mr. Lyons then referred to the Supreme Court decision in the Phillips case and the unsuccessful efforts to secure the passage of bills to remove the producer from regulation. He then discussed the Sept. 28, 1960 decision of the FPC under which the commission decided that the rate base method of regulation could not be applied to the independent producer. Mr. Lyons said that he felt the rejection by the FPC of the utility cost-of-service approach to the pricing of gas was definitely a step in the right direction but recognized that it may be challenged in the courts. He concluded by pointing out that the starting point for assuring continued growth of the gas industry is at the producer level and that the only solution to the producers' regulatory problem lies in remedial legislation to remove the doubts and uncertainties with which the producers are now faced. He expressed confidence that such legislation would be forthcoming.

Speaking for the gas pipelines, Mr. Clark said that the most serious problem they face today is trying to realize satisfactory earnings for stockholders in view of the inadequate rates of return allowed by the FPC and the difficulty of maintaining a large enough rate base on which this return is computed. He pointed out that the continually declining base as a result of depreciation charges has put great pressure on the pipelines to expand and to diversify in order to maintain this base. The problem of keeping satisfactory earnings for the common stockholders has also been accentuated by the fact that the cost of senior capital has gone up while the allowed rates of return have not increased accordingly. He felt that this process of diversification by pipelines will continue until such time as the FPC becomes more liberal either through allowing higher rates of return or recognizing fair value in determining rate base. He pointed out that, in the recent Tennessee Gas case, the commission allowed only 10% on the common, compared with the 13%-14% previously recognized.

He added that the price earnings ratios presently being used by the commission are unsound since this assumes that the stockholder is willing to pay the market price on the basis of present earnings, whereas the fact is that market prices reflect hoped-for future growth in earnings.

One other major regulatory problem has been the allocation of costs and rolled-in rates. The FPC has followed the policy of allocating to the industrial consumer a great part of the demand charge which should be borne by the residential consumer. This policy fails to recognize that in order to keep residential rates at a proper level, industrial rates charged must be low enough to compete with other fuels. If a pipeline can improve its load factor with industrial interruptable sales, it is in a much better position to keep down rates on gas sold ultimately to residential customers.

And, finally, Mr. Clark referred to the fact that the regulation of the producers as required by the Supreme Court in the Phillips case had complicated the problems of the pipelines by making it more difficult for them to buy gas because the producers preferred to sell on an unregulated basis in intrastate commerce.

In discussing the problems of the gas distributor, Mr. Otto referred to the Phillips decision in 1954, which made the gas producers subject to FPC regulation and to the unsuccessful efforts which have been made since to amend the Natural Gas Act to free them from such regulation. He pointed out the necessity for the various segments of the gas industry to get together to solve this problem in such a way as to allow the producer a fair price and at the same time permit the distributor to charge a rate which will enable him to compete in the market. He referred to the difficulties in getting all the gas companies to agree on proper prices in view of the differences in gas costs in the different areas served. He then expressed satisfaction with the FPC's statement of policy on Sept. 28, 1960 with regard to area pricing and the impossibility of regulating the producers on the basis of a cost-type rate base approach. He pointed out that this decision would go a long way towards relieving the commission of its administrative burden and expressed the hope that it would not result in internecine warfare in the industry.

Mr. Otto then referred to the desirability of educating the public towards the problems of the gas industry with the purpose of securing the passage of Federal legislation that would make it impossible in the future for the commission to apply the wrong type of regulatory principles to the gas producers. He pointed out that, while the present commission had taken a proper position on this point, there is no assurance that a future commission would do so unless its authority were limited.

He expressed the belief that the emphasis in regulation in the future will shift from the FPC to the state commissions and he pointed out the necessity of doing everything possible to see to it that the most able people obtainable are appointed to the state commission. This, he felt, might be far more important to the future of the gas industry than the particular method of regulation used at a particular time by the FPC.

RAILROADS

Chairman: Carl L. A. Beckers
St. Louis Union Trust Co.

Participants:

- J. E. Gilliland, V. P., Traffic Industrial Development
  St. Louis-San Francisco Railway Co.
- G. W. Maxwell, President
  Terminal Railway Association of St. Louis
- Herman H. Pevler, President
  Wabash Railway Co.
- Clair M. Roddewig, President
  The Association of Western Railways

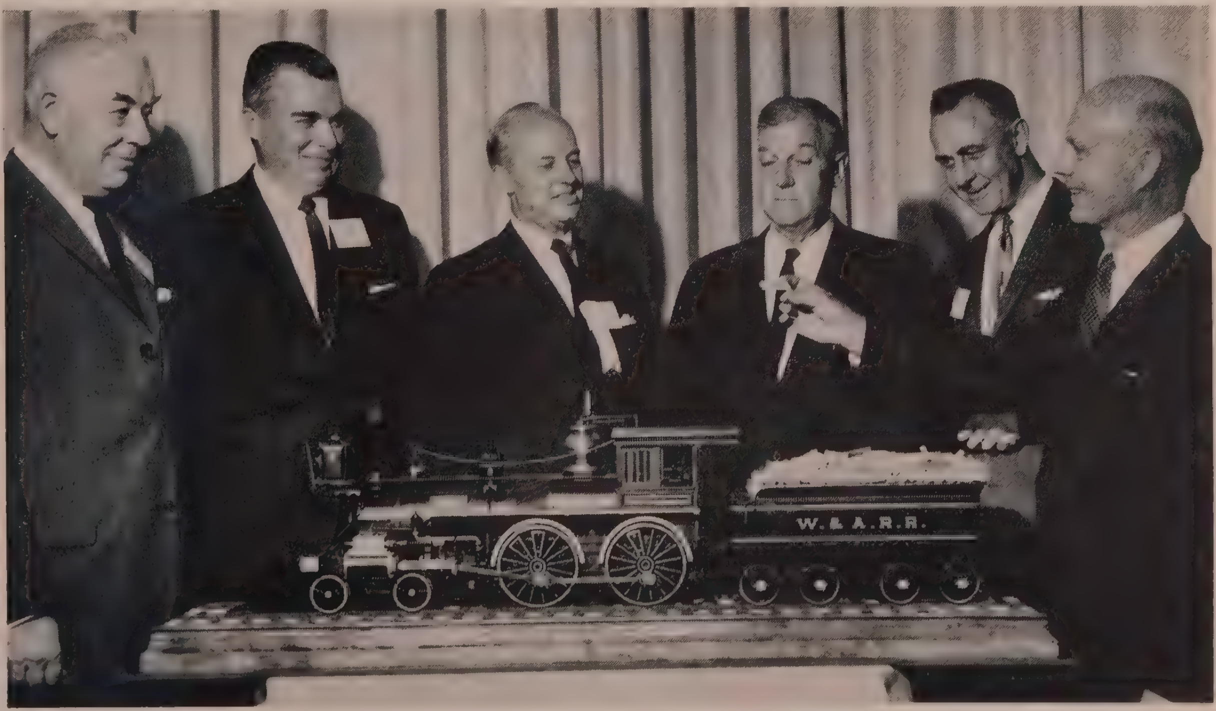
Speaking about "Piggy-Back, Present and Potential," Mr. Gilliland said:

"Cumulative piggyback loadings for the first thirty-nine weeks of 1960 totaled 414,959 for an increase of 105,970 cars or 34.3% (Frisco 49.3%, excluding automobiles) above the corresponding period of 1958. There are 55 Class I U. S. railroad systems originating this type traffic compared with 50 one year ago and 40 in 1958. However, it is still a relatively small factor in total rail freight carloadings, which were in 1959 30.1 million carloads, amounting to less than 2% of the total.

"Piggybacking has supplied to the railroads a missing ingredient in rail transportation; namely, lack of flexibility. By means of TOFC service the railroads have been enabled to reduce long terminal delays which box car traffic is subjected to. These delays are mostly those involved in switching cars from industrial sidings to classification yards for train make-up in the larger terminals, such as St. Louis, Chicago and many others.

"An illustration of the big speed-up which is one of the greatest attractions of the TOFC system is evidenced by the fact that the piggyback flat cars are averaging close to 200 miles per day in loaded service as against an average of slightly more than 50 miles per day for all other rail freight car equipment. On the basis of utilization of equipment, 1,000 piggyback flat cars is equivalent to better than 4,000 units of other types of rail equipment. Assuming that the average revenue per carload of piggyback traffic were the same (actually it is higher than other equipment) a piggyback flat car can conceivably produce more than $20,000 of annual gross revenue for the railroads in contrast with less than $5,000 of annual average gross revenue on all equipment. This high degree of utilization, or productivity, as it can be termed, will have a distinct bearing on capital investment by the railroads in this type of equipment.

"Piggybacking is not only growing in volume and area, but in usage. The list of commodities it is used to move is extending to virtually every commodity. Some of the unusual ones are bulk materials, such as flour, sugar, dry chemicals, and oil and chemical-carrying tank trailers. Livestock is now regularly transported in piggyback service, with two trailers per flat car, which can



THE CIVIL WAR'S 'GENERAL.' Grouped behind this scale model of the famed locomotive are, from left to right: Herman H. Pevler, president of Wabash Railroad Co.; Gregory W. Maxwell, president of Terminal Railroad Association of St. Louis; Carl L. A. Beckers, convention chairman; Clair M. Roddewig, president of Association of Western Railways; and J. E. Gilliland, traffic vice president of St. Louis-San Francisco Railway Co. With miniature "burning log" in hand is Leo Myers, of Myers Tool and Machine Co., who built the model locomotive. This was another well attended forum.

move up to 70 head of cattle as against minimum of 21 in most rail stock cars. . . .

"Perhaps one of the outstanding by-products of piggybacking has been the development in the past year of the movement of new automobiles by special racks attached to 85-foot piggyback cars. Substantial increase in payload has resulted in the railroads getting back into a type of traffic which had virtually disappeared and in a very wholesome manner; namely, improvement in service and reduction of transportation charges. . . .

"Another new area of considerable excitement is that of containerization of rail-highway freight. While it can hardly be expected to duplicate in the next five years the tremendous growth of piggyback operations, expansion of container service appears inevitable. Widespread study is being made for potentialities for creation of new traffic."

"The Effect of Terminal Operations on Railroad Costs" was the subject of Mr. Maxwell's address.

"In discussing some of the suggested areas of possible improvements in cost control, and then reviewing what progress has been made in each of these fields, I should like to comment first on the problem which arises in the railroad industry as to the payroll dollar.

"The railroad industry, because of the expense of maintaining a large fixed plant plus a heavy payroll expense of operating the respective properties, has the highest payroll dollar of almost any segment of American industry. The comment is sometimes made by sources outside the industry that they cannot understand why railroad employees who are affected by automation cannot be retrained and shifted to other areas of the railroad business as is done in manufacturing industries. I should like to make clear that because of this very high payroll dollar in the railroad industry, the payroll has to be reduced which means reduction in the number of employees on the payroll, and that simply shifting employment from one area of the railroad business to another is not the solution to expense reduction. . . .

"If we examine some areas of possible cost reduction and if we consider such reduction as percentages of our freight revenues we might consider the following:

"Mechanization of maintenance of way activities; it is possible to gain approximately 2 to 3% in reduction of such costs. Automation of clerical operations; it is possible to gain from 1 to 1½% in reduction of such costs. The railroad industry is plagued by a tremendous volume of clerical work, caused in large part by voluminous reports required by various regulatory commissions.

"Elimination of duplicate operations: It appears to us that there is little reason for this company at this gateway to engage in switching of through business intended for points beyond St. Louis. For this reason, we have granted the inbound line haul carriers at St. Louis a reduction in rates to make attractive to them a system whereby they pre-block trains of freight cars intended for delivery to our company for further direct movement to outbound carriers. This results not only in a saving to the carrier performing such pre-blocking but also results in a very definite improvement in the service factor, the time in transit over our line dropping from 16-18 hours down to an average of about 2½ hours. In our own case this has meant a 2 to 3% reduction of costs returned to the using carriers.

"Building new terminal freight yards: We conservatively estimate that reductions in cost brought about by such construction would amount to 10 to 15%. Of course, the new automated yards have a widespread effect on operations over large areas and because of this widespread effect it might be desirable for more of the carriers to make use of outside financing for money to build such yards.

"Elimination of unneeded duties: Specifically one of the biggest problems that we are confronted with here is the use of firemen in locomotive operation. Our wage bill for firemen in freight operation alone for the past year amounted to $1,300,000 which included fringe benefits and vacation payments. You can readily see that the removal of firemen from our locomotive operation would amount to approximately a 5 to 6% reduction in costs. Under present train operation in the railroad industry it does not appear to be necessary to have firemen present in freight train operation or in yard operation.

"Automation of train operation itself: The economies are unknown as yet but transportation ratios of most railroad companies vary from 38 to 48%, and included in this transportation expense are two major items of freight train and yard engine crew payrolls which would be directly affected by automation of train operation. . . .

"At present, it would appear that the automation is more readily adaptable to road freight train operation, although yard operation can certainly follow closely behind. This particular field is tremendous and it is just opening up."

Speaking about "Freight Train Operations," Mr. Pevler stated:

"A major source of expense and a delay in freight service is incurred in the handling of trains through yards and terminals, so that the transportation scheme must eliminate all of the re-classifications and yard costs possible because excessive re-classifications or second handling and excessive yarding impairs the service and increases the cost.

"This problem has been basically attacked in two ways. Many railroads believe—and with good reason—that classifications at intermediate terminals save the greatest cost and provide the best service for these particular properties.

"Others believe that basically classification should be made at the point of origin of the trains, and the train so blocked or classified that cars can be added to these trains in the blocks or the blocks set off without reclassification enroute to the final destination. The physical characteristics of the property, and by physical characteristics I mean the number of lines that contribute traffic to the main flow and the volume of traffic, will of necessity determine which basic scheme is least expensive and provides the best service.

"We on the Wabash believe that the second scheme serves our purpose best and our basic service is built upon this plan. For example, trains originating at Kansas City are so classified that blocks can be set off at Moberly, Decatur, Logansport, Huntington and Montpelier and cars can be added in the blocks in these trains which we believe uses the minimum amount of time and minimum amount of yard expense between these terminals. This same scheme applies all over the Wabash property. . . .

"We are too often blind to the situations in which we put engine crews in the operation of big trains which causes excessive delay or encourages these crews to take unnecessary chances that invariably result in unfortunate occurrences. If we are to expect the best performance, every deterrent physically possible must be removed from the physical characteristics of the railroad.

"It is my opinion that one of the weaknesses in the rail transportation system is the length of time that is required for making interchanges between connecting railroads. This problem is receiving a great deal of attention and considerable improvement has been made. The time when deliveries were made to connections at the convenience of the delivering carrier without regard for the requirements of service is on its way out, and the current trend, which in many cases has been observed for years but in too many cases has not been observed, is to make deliveries based on inbound trains to the connecting lines' designated outbound trains and to so schedule trains that this time will be at an absolute minimum.

"A shipper is not interested in the excellent performance on one railroad. He is interested in the overall time from the point of origin to the destination and if we are to enjoy any reasonable amount of business, schedules between railroads must be worked out so that a minimum amount of time is allotted for interchange. It must be on a scheduled basis and the schedules that are furnished the shipper contemplate the perfect performance of all of these factors."

Mr. Roddewig, ably substituting for Russell Dearmont, president of Missouri Pacific Railroad Co., who was ill, provided the railroad forum with excellent background statistics showing the industry's trend of net income for the past several decades, as also the trend of the industry's gross revenues, railway employment, distribution of intercity freight, and miscellaneous operating statistics.

Mr. Roddewig stressed the inability of the industry to expand its earnings in recent years in the face of rising labor costs and the inability of the industry to absorb such costs, the industry's ton mile rate in 1959, 1.445 cents, being lower than that of 1953, 1.478 cents, despite inflationary factors in the six ensuing years.

As a means of rectifying the imbalance as described, Mr. Roddewig described the program of the American Association of Railroads in propounding changes in working rules and how such changes, if obtained in full, would enable the industry to reduce its labor costs by some $475 million annually.

Additionally, Mr. Roddewig stressed the changing political climate as exemplified by the changing attitude of the numerous regulatory bodies, both Federal and State, in approving, (a) abandonment of certain services wherever unprofitable; (b) reduction of taxes wherever unsupportable; and (c) adjustment of railroad freight rates wherewith to compete aggressively for high rated traffic instead of maintaining—as has been the case for several decades prior to the passage of the Transportation Act of 1958—an umbrella over its competitor's rates.

RADIO CORPORATION OF AMERICA

The Most Trusted Name in Electronics

Dividend Notice

The following dividends have been declared by the Board of Directors:

First Preferred Stock

87½ cents per share on the First Preferred Stock, for the period January 1, 1961 to March 31, 1961, payable April 1, 1961, to stockholders of record at the close of business March 6, 1961.

Common Stock

In addition to a regular quarterly cash dividend of 25 cents per share, a 2 per cent stock dividend was declared on the Common Stock. The cash dividend is payable January 23, 1961, and the stock dividend January 30, 1961, both to stockholders of record at the close of business December 16, 1960.

ERNEST B. GORIN,
Vice President and Treasurer

New York, N. Y., December 2, 1960

AMPHENOL
★ BORG ★

Dividend Notice

Broadview (Chicago suburb), Illinois—At a meeting of the Board of Directors of Amphenol-Borg Electronics Corporation held today a quarterly dividend of thirty-five cents (35¢) per share was declared payable December 30, 1960, to the stockholders of record at the close of business December 16, 1960.

FRED G. PACE, Secretary.
November 22, 1960.

CONVENTION FIELD TRIPS

Chrysler Corp.—Anheuser Busch

Chairman: Haworth F. Hoch
McCourtney-Breckenridge & Co.

Analysts arrived at the new Chrysler Corporation St. Louis assembly plant at 9:45, where introductory remarks were made by E. C. Shawe, plant manager, while a light breakfast was served in the office employees' cafeteria.

Although the assembly line had been shut down the preceding Friday, visitors saw the four makes of cars produced on this assembly line in all stages of completion, and actually the tour was more interesting in that there was little noise or confusion to interrupt comments of the guide. The plant is the most modern automobile assembly plant in the United States, and is a masterpiece of control in that all assembly work for the Plymouth, Valiant, Dodge Dart and Lancer is handled on one assembly line. Before leaving the plant area the Analysts visited the loading dock area served by the St. Louis and San Francisco Railway, and witnessed the loading of finished automobiles onto the new three decker flat cars, each carrying 15 automobiles.

The next phase of the tour was to the well-known Grant's Farm, a show place of St. Louis, where a brief auto-train ride permitted the visitors to tour the grounds, and view the herd of wild animals that roam there. Luncheon was served in the "Baurn-hof," and was highlighted by remarks made by C. J. Houser, administrative vice president, relative to the brewing industry and the business of Anheuser-Busch in particular. Buses then took guests to the main plant in St. Louis where a tour of the world's largest brewery was made. Upon completion of the tour, the group met in the "Pent House," (the Executive lunch room) with a number of the brewery officers, who were on hand to explain all phases of the company's operation.

* * *

A. O. Smith Corp. — Granite City Steel Co.

Chairman: J. Vernon Readey
Stifel, Nicolaus & Co., Inc.

The group arrived at the Granite City, Illinois, plant of A. O. Smith shortly after 10:00 a.m. Safety glasses were issued and guides assigned for the plant tour.

Highlights included the almost completely automated sheet steel cleaning line and the frame aligning device which insures that each frame meets exact specifications. Other quality control measures were equally impressive. The plant is devoted entirely to the production of Chevrolet frames.

Morris J. Vollmer, vice president and treasurer reviewed the annual report for the fiscal year ended July 31, 1960. It had just been released. The relatively poor year was attributed in part to the steel strike. Sales volume fell short of forecasts and profit margins narrowed severely. Forecasts for this fiscal year are mixed with some divisions expected to do very well and others not so well. Mr. Vollmer indicated that he expects the automotive and capital equipment divisions to continue to provide the bread and butter for the company, and looks to the other divisions for growth.

Urban T. Kueckle, vice president,

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FEDERAL

FEDERAL PAPER BOARD CO., Inc.
Common & Preferred Dividends:

The Board of Directors of Federal Paper Board Company, Inc. has this day declared the following quarterly dividends:

50¢ per share on Common Stock.
28¾¢ per share on the 4.6% Cumulative Preferred Stock.

Common Stock dividends are payable January 14, 1961 to stockholders of record at the close of business December 29, 1960.

Dividends on the 4.6% Cumulative $25 par value Preferred Stock are payable March 15, 1961 to stockholders of record February 28, 1961.

Robert A. Wallace
Vice President and Secretary

December 13, 1960
Bogota, New Jersey

automotive products, then spoke briefly on the automobile industry. He believes the 1961 model year will be about the same as 1960. The steel strike particularly hurt profit margins on frame production because it caused a delayed start and overtime was necessary to meet delivery schedules. Mr. Kueckle believes small car imports have reached a peak and will stabilize or perhaps decline from this point.

The Analysts were invited to ask questions. Besides Mr. Kueckle and Mr. Vollmer, officers present included Thomas Sullivan, plant manager; Norman Paulsen, director, public relations and Pat Busch, comptroller.

The Analysts then departed for the administrative headquarters of Granite City Steel Co. Following luncheon, another company courtesy, Nicholas P. Veeder, chairman of the board and president, addressed the group.

He said that the company is experiencing a pick up in orders, with every month since June topping the previous month. During the third quarter the company operated at 68% of capacity. Mr. Veeder indicated that Granite City Steel should operate at about the same level as in the third quarter, or slightly better, for the remainder of the year.

Miss Lillian B. Green, industry analyst, for Granite City Steel, then spoke briefly on the steel outlook. In her opinion the rate of operations for the steel industry has already passed its low point and that any upturn in consumption would very quickly be reflected in a higher production rate. She believes 1961 production in terms of tonnage will at least equal that of 1960.

High points of the well-guided tour of the facilities included the blast furnace division where a third battery of coke ovens is being constructed and a new blast furnace is nearing completion. The two electrolytic tin lines, one of which was completed last spring, drew a lot of attention. Analysts had the opportunity to watch a reversing blooming or slabbing mill in operation. In 2½ to 3 minutes, this 10,000 h.p. mill can reduce ingots weighing 24 tons to a slab of steel about 6 inches thick.

After the tour, executives of Granite City Steel were hosts at a reception. In addition to Mr. Veeder, James L. Hamilton, Jr., executive vice president; Lyle F. Gulley, vice president of operations; W. F. Hoelscher, secretary and treasurer; and William R. Bascom, vice president of finance and law, were available to answer questions.

* * *

Ralston Purina — Peabody Coal

Chairman: Guy Lamson
Yates, Heitner & Woods

About 45 Analysts left the Chase Hotel for Checkerboard Square in St. Louis. Upon arrival at the Ralston Purina executive offices, H. C. Schaefer, director of the Ralston Research Laboratories, gave a short talk about the role research is playing and has played in Ralston's long history of service to the American farmer.

After an extensive tour of the laboratories Ed Rowland addressed the group on the role played by scientific feeding of agricultural animals and the production of Purina Chows. An extensive tour of the St. Louis mill (the company's largest) was followed by a luncheon served in the company's new auditorium and reception center. Hosts at the luncheon included Donald Danforth, chairman of the board; Ray Rowland, president; R. M. Bethke, vice president (research); D. L. Grant, vice president (manufacturing); J. McGinty, vice president (director of sales promotion); and C. A. Tolin, vice president (finance officer). Mr. Tolin gave an interesting talk summarizing Ralston's growth and diversification into foreign markets (France and West Germany) and the phenomenal rise in sales of pet chows and new products.

Following luncheon the Analysts visited the River King Mine of Peabody Coal Company at Freeburg, Illinois. Hosts were: F. S. Elfred, chairman of the board; R. J. Snider, vice president (finance); S. L. Jewell, vice president (public relations); and L. B. Franklin, vice president (sales).

At the mine, inspection of the recently installed "Wheel," giant earth moving wheel which removes overburden by conveyor from a height of 17 stories, and "Big Paul," the giant shovel, reflected the tremendous efficiency of this operation. Following this, the Analysts visited the washing plant and engineering office at the mine where the geology and engineering phases of the operations were discussed. The tour ended at the company's executive offices in St. Louis where informal discussions were held with many Peabody executives.

* * *

Olin Mathieson — Owens-Illinois

Chairman: Frank Dunnagan
Smith, Moore & Co.

Buses took us directly to the Westerner Club, an employee club house on the grounds of Olin Mathieson Chemical Corp., for coffee and doughnuts. Russell R. Casteel, vice president, briefed us on the processes we would see.

The Alton plant covers 1,700 acres with 30 major manufacturing buildings. Therefore, in our alloted time we were able to see only a small part of the operation. We first toured a part of the commercial ammunition plant—one of the two largest in the U. S.—where shot gun shells, center and rim fire cases, and bullets are made. Time did not allow viewing the loading operation.

Next we toured part of the Western Brass plant, reputedly the largest in this country. Here are rolled all types of sheet and strip brass, copper, and copper alloys. A total of 40 different copper alloys are processed in this plant.

About 15% of the brass plant output is used internally and the balance sold in the automotive, building, and building hardware, and miscellaneous industries. Small stamped and drawn brass parts are also fabricated.

We then reassembled at the Westerner Club where Mr. Casteel; George Chandler, plant manager of Western Brass Mills; Floyd Bennett, East Alton ammunition plant manager; and George Sigelman, director of operations, energy division, were available to answer questions. Time did not permit visiting the very interesting roll-bond operation, or the energy division.

Buses took us immediately to the Owens-Illinois Glass Co.'s machine manufacturing plant at Godfrey, Illinois, where a major portion of machinery and tool requirement of Owens-Illinois' 63 plants producing glass, plastic, and paper products are supplied.

We were briefed on our post luncheon tour of the glass plant at Alton, which is one of the world's largest. Earl E. Smith, treasurer, commented that the operating divisions were "busy, with some operating at levels beyond their normal capacity." Palmer W. Hancock, vice president of finance added, "Our plastic container business is growing rapidly." Also outlined were the companies global expansion moves along with details of its investments and working agreements in Europe, Latin America, Asia, and Canada.

We then toured the plant (a long walk) and saw most types of glass bottle manufacture. The Alton plant contains the only automatic machine in the world capable of making 6½ gallon bottles.

At a reception, officials of the company, along with the plant manager and superintendents, answered Analysts' questions.

★ ★ ★

McDonnell Aircraft—Emerson Electric

Chairman: Fred Arnstein, Jr.
Stix & Company

On the trip to McDonnell Aircraft Corp., we first saw Mac's highly automated parts manufacturing area and a glimpse of the testing and experimental laboratories.

Then we were shown three areas which are integral in this company's future plans. First was the computer center where some $9,500,000 of the most up-to-date electronic computing equipment is available, both for company use and for others on a contract basis. This is the largest center of its kind in the Middle West. McDonnell feels that its computer experience can be invaluable to other concerns faced with problems to which such machines can be applied. Next was shown the plane assembly area where Mac is currently working on deliveries of the F4H to the Navy. This is one of the world's fastest and deadliest fighter aircraft. Its activities in this field make the company the largest manufacturer of fighter aircraft in the free world.

The third facet of the company's operations was the project Mercury, or the U. S. man-in-space program, for which McDonnell is prime contractor. The current contract calls for delivery of 20 space capsules to the government. The company feels that the experience gained in this program will be most useful for future projects involving space flight, an area where they see an excellent potential for growth.

After the tour of the plant there was a session with company officers headed by James S. McDonnell, chairman of the board and president. The company's anticipations for fiscal 1961 were that the sales would be somewhat under the $437,000,000 for 1960, but that earning would be in line with the $3.55 earned. Management feels that the future for inhabited aircraft and space vehicles will remain good and there is no intention of abandoning this segment of their business. However, at the same time they are very interested in diversification and are seeking attractive situations which could be fitted into the company's future operations.

At a noon luncheon the group met with the officers of the Emerson Electric Manufacturing Co. headed by W. R. "Buck" Persons, president. The company's growth since the advent of the present management, some five years ago, was cited and a booklet distributed which had been printed earlier in the year for the shareholders. It was pointed out that the company, which has doubled its earnings in the past three years, hopes to repeat this performance in the next four or five years. For fiscal 1960 they anticipate that earnings fell slightly under the estimate of $3.00 per share which compared to the adjusted figure of $2.26 for the previous year.

Emerson's products fall into three main categories. First is electronics and avionics which would include the fire control mechanism for the B-52 and B-58, the Honest John and Little John ground-to-ground missiles, and Thermo-Lag — their dramatic new temperature control product. Next is the group of builders' products including both the Day-Brite and Pryne line of commercial and home lighting equipment, exhaust fans, range hoods, etc. Mr. Persons pointed out that in the most recent year, with a 20% decline in home building, sales of this division increased some 7%. Included in this category are the items which Emerson manufactures under contract for Sears, Roebuck & Co., such as power tools and welders for the home workshop. The last category is electric motors. This division has shown a steady year-to-year increase and the company has recently completed the most modern fractional horsepower motor assembly plant in the world to substantially increase its motor manufacturing capacity.

After a discussion of the prospects for the company the Analysts were taken on a tour of the St. Louis manufacturing operation. A further question and answer period was then held with the company officials, ending a most active and informative day.

(Editor's note: Among visiting Financial Analysts who went on the McDonnell Aircraft—Emerson Electric trip was Roy L. Garofalo of Clark, Dodge & Co. So in addition to Trip Chairman Fred Arnstein's account, readers are given a visitor's view of the same trip by Mr. Garofalo.)

McDONNELL AIRCRAFT

For about a hundred of us attending the October 16-18 Regional Convention of Financial Analysts in St. Louis, two of several high points were the field trips to McDonnell Aircraft Corporation and the Emerson Electric Manufacturing Co.

At one time St. Louis was affectionately considered to be "first in brews, first in shoes, and last in the

American League." Since long, long before the Browns left, the city has occupied a strategic position in the nation's economy as a major transportation center and the locus of a multitude of extensive and widely diversified industries.

A tribute to McDonnell's visionary and dynamic management is the fact that while the company has just reached its majority (21 years old this past July), it is the city's largest employer (almost 24,000) with an annual payroll running near $155 million, and producing almost $1/2 billion in sales. Plant facilities, which represented an investment of under a million dollars as recently as 10 years ago, have been expanded to almost $27 million (after depreciation) presently. In this period, the company has made aeronautical history, turning out some of the nation's deadliest and most advanced fighter planes. A culmination is the F4H Phantom II, a high performance (1500+mph), twin jet-engine attack-fighter, likely to become the backbone of the Navy's air arsenal. These facilities, and those with which the company hopes to carve out for itself a portion of the growing astronautic and automation industries (all occupying nearly four million square feet just outside the city) were visited.

Only a small portion of the company's sprawling $12 million laboratory and testing facilities could be observed during the compactly scheduled morning tour. What we saw was patent proof of the company's capabilities in the area of technical research, design, development, and testing—all geared toward support of McDonnell's basic aero-astronautic business. A stop was made at the hypervelocity impulse tunnel, completed just six months ago at a cost of $1,000,000. This equipment was designed to test space vehicle models under conditions simulating those likely to be encountered in re-entry from space, and, like much of the laboratory equipment, is available on a fee basis to other groups doing work on space projects.

Among the specifications are: simulation of flight conditions at an altitude of up to 60 miles at speeds ranging from 10 to 27 times the speed of sound (up to about 20,000 mph); pressures up to 100,000 psi; and temperatures to as much as 14,000°F. The energy source can deliver as much as 3.6 milion amperes at 12,000 volts in 3 milliseconds, during which time the tunnel draws more current than the five largest cities in the U. S. combined. During a test, data can be recorded on magnetic tape, digitized, reduced by IBM equipment and automatically plotted. For immediate monitorization of test results, direct readings can be taken during a test run. The facility is one of the two most advanced ones in the nation. Companion polysonic (a range of 1/2 to five times the speed of sound)

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The impressive automation center confronted us with nearly a block-long array of $7,000,000 worth of data processing equipment. More than 300 data and system specialists utilize analog and digital equipment in the solution of technical and administrative (budgeting, accounting, production, and marketing) problems. The company proposes to add an IBM 7090 soon and the first commercially available 7080 next year, thus effectively increasing capacity fivefold. The electronic and human resources at this center, one of the largest in the U.S., are likely to be utilized by some of the nation's largest corporations. Last year, completed work and year-end backlog was reported at over $45 million.

Aeronautic and astronautic production facilities were also visited. The Phantom II in various stages of assembly presents a fascinating picture. Modern, high speed and performance, fully automated milling machines shape massive portions of the air-frame to very close tolerances out of special alloy steels. In an airplane designed to travel as much as 1500 miles per hour at near 100,000 feet, as large a premium must be placed on precision and accuracy as on speed of production. The Phantom II assembly areas give the impression of a delicate balance of human and mechanical resources in the efficient production of one of the world's most devastating manned airplanes. Already 25 have been delivered to the Navy, with 190 more on order through 1963, representing about $650 million of business. Orders for several hundred more F4H Plantoms are expected, with repair and spare parts business likely to run for many years.

Only a visit to the Project Mercury assembly areas could make the F4H productions facilities seem prosaic. Working with the National Aeronautic and Space Administration, the company has been selected to produce a space capsule to contain America's bid for the first "man-in-space". In "White Rooms," temperature, humidity and dust are minutely controlled and, under conditions which rival those under which major surgery is performed, the capsules are carefully assembled. These precautions are necessary to avoid airborne contamination. Production and assembly proceeds with the deliberations and care which few other undertakings could justify. Reliability of control, communication, and environmental equipment is tested and retested. Mass-production techniques do not apply here (only three of twenty capsules have been delivered since the contract was let over 1½ years ago, despite 3-shift, 7-day-a-week schedules)—rather the consumate skill of a Renaissance master working with canvas and oils. The pure-titanium skinned satellite, which we hope will some day carry a man 100 miles into space, into three orbits, and back to earth again (all in about 5 hours), was very likely being painstakingly assembled before our eyes.

Closing remarks were made by Messrs. Forsythe, Toole, and Farmer (all officers or managers) and Don Fabianni, financial vice president. A stimulating question period followed, conducted by President Jim McDonnell, the captain of a well-organized team.

McDonnell's sales in the year ended this past June 30 were $437 million, but are likely to decline moderately in the present fiscal year. Nevertheless, earnings are expected to be about the same as last year's $3.55. A higher percentage of cost-plus-fixed-fee defense business results in very thin profit margins (under 3%). Nevertheless, the return on net worth is a healthy 23%, well above that enjoyed by many manufacturing companies.

Management has announced that widening of the margin of profits would be a primary objective in the coming months, with diversification a major route in this quest. Athough unwilling to abandon manned aircraft, until now its bread-and-butter business, internal diversification has already progressed: while 90% of sales were derived from aircraft in 1959, in fiscal 1960, 10% of sales came from missiles, another 10% from astronautics, and 6% from electronics. Acquisitions outside of the defense field is likely to be another approach, and McDonnell hopes to make announcements of success along these lines in the coming months. If the company's record in the aircraft business is any augury, McDonnell should one day be a leader in the automation and astronautic industries. Certainly the wherewithal and determination are not lacking.

EMERSON ELECTRIC

Electronically-controlled motor drives for the paper and textile industries, automatic electronic test equipment for printing, paper, plastic, pharmaceutical and electrical component manufacturing processes, automated warehousing, inventory control, steel processing, and metal fabrication, around-the-clock artificial lighting, heating, and ventilation, ultrasonic cleaning and cooking, and automatic, electronic safety devices on the highways, and electric automobiles were all anticipated in the near future (where they have not already materialized) by W. R. "Buck" Persons, president of Emerson Electric, in his address entitled "The Magic Tomorrow of Electricity," before the St. Louis Regional Convention of Security Analysts. The case for imagination-defying strides in the area of utilization of electric energy is a case for Emerson, a leader in the development and manufacture of electrical and electronic products for the consumer, industry, and the military.

After an excellent lunch at the Glen Echo Country Club, as guests of Emerson, and a discussion of promising new products ("Thermolag") and new developments (advanced Sonar), we toured the headquarters plant at 8100 Florissant, one of 12 plants in the U. S. and Canada. A major portion of the output at this plant consists of Electronic and Avionics Division products: electronic fire control equipment for the Convair B-58 and Boeing B-52 bombers, a radar Mortar Locator System, portions of the "Honest John" and "Little John" missiles, and other electronic components. In addition, electric motors, power tools, and welders are manufactured here.

The first stop we made was also the first that much of the electronic components used in production makes. In the electronic receiving and inspection area, test equipment, largely designed and built by the company, is utilized to test complex electronic devices. No stone can be left unturned in the quest for maximum reliability of the delicate and crucial military electronic equipment assembled. We passed through sub- and final-assembly areas for the company's own designed and engineered automatic fire-control systems for the nation's two most potent bombers. While the equipment is intricate, assembly-line-type techniques are utilized wherever it does not compromise the quality of output. We watched assembly operations on a new computer portion of an aircraft electronics system. Transistorization had permitted the weight and space to be cut to half the requirements of the older device. Further along the line were the "Honest John" parts production and fire assembly areas, and the "Improved Honest John" and "Little John" precision-parts machining sections. New areas and improved equipment were being set up to increase capacity. Automatic tape-controlled drilling, boring, and reaming units, and stylus controlled vertical milling machines were being added. The equipment performed numerous, diverse, delicate functions with a minimum of human attention. It was in these production areas that answers to some of our questions were firmly declined, a rebuff a security analyst can only suffer gracefully when "security restrictions" is given as the reason.

Although it makes an important contribution to the nation's defense capability, only about 30% of Emerson's sales are derived from Electronics and Avionics. "Builder Products" (ventilators, heaters, lighting fixtures, fans, etc.), electric motors, "do-it-yourself" tools, and home lighting fixtures constitute the most important areas of manufacturing.

The company is the largest independent producer of fractional horsepower electric motors and, in recent years, has succeeded in obtaining an increasing share of this rapidly growing business. (Few of us were aware that there are upward of two dozen electric motors in the average home today, and this could increase by 50% in ten years.) Emerson has pioneered in the design and manufacture of smaller, high-performance motors, and in the development and application of highly automated equipment to the manufacturing process. In temperature and humidity controlled atmospheres, we watched the mass-production of hermetic motors produced primarily for ultimate incorporation into refrigerators. Company-designed automatic, high speed, insulating, winding, and lacing machines were being utilized in the production of some of the over 800 types of motors turned out by Emerson. In the appliance industry alone, over 20 companies use Emerson motors.

The company absorbs a portion of its electric motor output in the manufacture of "do-it-yourself" tools (gas and electric arc welders and bench and radial arm saws). Small electric welder and other power tool assembly areas were among the final stops made during our tour of the Florissant Avenue facility. The visit was concluded with a dramatic and vivid demonstration of one of the newer baseboard electric radiant heaters and the rewarding opportunity to query top management on any subject needing clarification or elaboration.

Emerson has amassed one of the more enviable records in the dynamic (though highly competitive) electric equipment industry in recent years. Not coincidentally, the dramatic gains began about the time President Persons came upon the scene. If the company succeeds in its objectives for 1960, it will be in the enviable position of having almost doubled both sales and earnings in a 3-4 year span. Effective product development, vigorous cost cutting, internal expansion, and well-reasoned, strategic acquisitions have made their contributions to improved sales, profit margins, and earnings. Obviously, progress of this magnitude does not "just happen"; rather it is a tribute to the skillful band of young imaginative executives whose guests we had the pleasure of being one mid-October Tuesday afternoon. We left convinced that recent progress is unlikely to "stop happening."

BALTIMORE GAS AND ELECTRIC COMPANY

Serving one of America's Great Industrial Centers

QUARTERLY DIVIDENDS

Dividends of $1.12½ a share on the 4½% Preferred Stock, Series B; $1.00 a share on the 4% Preferred Stock, Series C; and 25 cents a share on the Common Stock, have been declared for the quarter ending December 31, 1960, all payable January 3, 1961, to holders of record at the close of business on December 15, 1960.

J. THEODORE WOLFE, *President*

Dividends paid on the Common Stock continuously for half a century—always earned—never reduced.

The UNITED Corporation

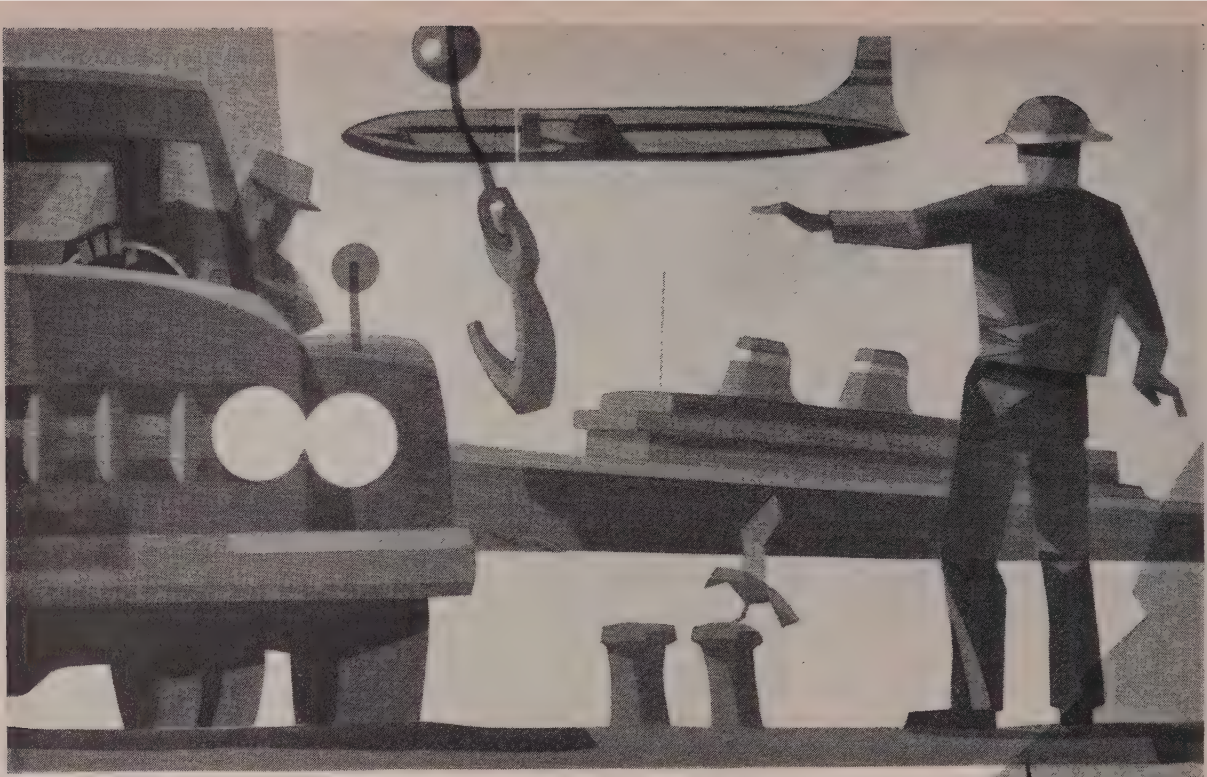
The Board of Directors has declared dividends totaling 25 cents per share, payable December 16, 1960 to stockholders of record November 25, 1960.

Of the 25 cents per share, 10 cents per share is designated as a dividend paid from net investment income and 15 cents per share as a dividend paid from net realized gains on investments.

In June 1960 the Corporation paid a dividend of 10 cents per share for net investment income. Thus, total 1960 dividends will be 35 cents per share, the same as total 1959 dividends.

Of the total 1960 dividends 20 cents per share is from net investment income and 15 cents per share from net realized gains on investments, the same as paid in 1959.

November 10, 1960. WM. M. HICKEY, *President*



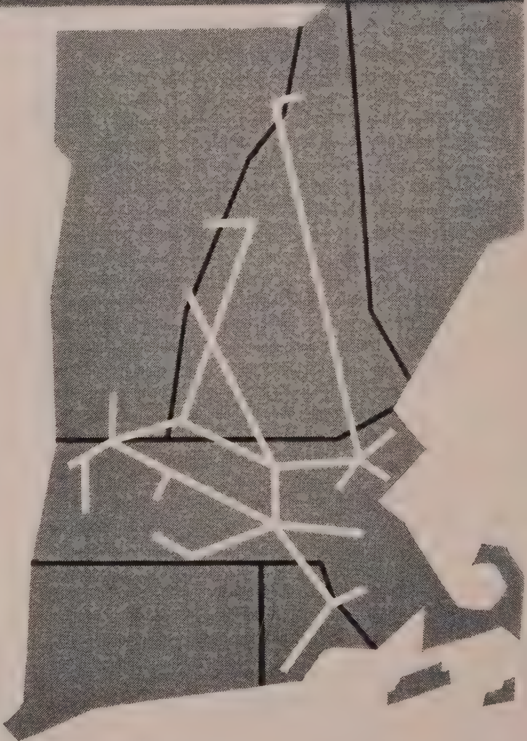
In New England

people are going places . . . fast

New sea and airport facilities each day bring the Old World closer to the New. Across fertile pastures and woodlots, over streams and hillsides, new super-highways are making the whole of New England one unified, bustling community.

Out on the road today you may pass a chemistry professor commuting to his Cambridge classroom from southern New Hampshire . . . a banker out from town to look over some new industrial property . . . skilled workers in sports cars . . . men, women and children hurrying to new plants, new places and pleasures.

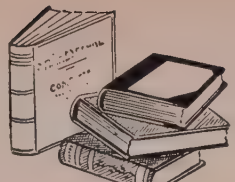
Today New Englanders are alive to new ideas, new jobs, new opportunities . . . to living life fully the year 'round. Your plant or your business can prosper here.



NEW ENGLAND
ELECTRIC SYSTEM

This thriving region's largest electric utility system, New England Electric, lies in the heart of the world's most diversified industrial area, serves over 4,700 industrial firms and more than 1,000,000 customers.

NEW ENGLAND ELECTRIC SYSTEM, Boston 16, Massachusetts



BOOKS for ANALYSIS

A STRATEGY OF DAILY STOCK MARKET TIMING FOR MAXIMUM PROFIT. By Joseph E. Granville. New York: Prentice Hall, Inc. 289 pages. $12.50.

Reviewed by DONALD H. RANDELL

Over the past two decades this reviewer has read a great many books on various aspects of business, economics and/or the stock market; and he has summarized quite a few for The Financial Analysts Journal readers.

Mr. Granville's work ranks at the very top for clarity, originality and organization of the comprehensive material. The book could well, as will be explored later, prove to be one of the most valuable influences yet created to benefit the amateur investor — both in or out of Wall Street.

The text quite properly observes that stock prices are set emotionally, not rationally, and offers a series of yardsticks by which the overall short-term outlook may be gauged. Mr. Granville points out that the market as a whole responds to the algebraic total of all the bullish and bearish stimuli that are in effect as of any given time. Consequently, an approach that depends on the proper measurement of the broadest possible spectrum of potential plus and minus factors should result in maximum reliability.

The author uses an ingenious method to calculate the probable component result of 55 separate indicators which are constantly flashing their kaleidoscopic clues toward the gradual weighing of sentiment in favor of a rapid rise or a sharp decline in the average.

His approach to intermediate term forecasting encompasses a different set of factors. He outlines the logic behind the use of Barron's Confidence Index as a barometer of market sentiment which enables the initiate to determine well in advance whether capital will be flowing into or out of the equity market. Mr. Granville traces a line of reasoning which concludes that the declines of 1937 and 1946, as well as the 1958 upswing, might have been anticipated. His own calculations which predicted the 1959 and 1960 declines are set forth.

In addition to the gyrations of the Confidence Index, other tools and techniques are detailed in the text, such as the advance-decline ratios; the "index of disparity;" the timing clues afforded by stock-splits and secondary offerings; and the barometer of public sentiment to be found in the fluctuations of the short interest. All of these variables must reflect to some degree the ebb and flow of investor and speculator sentiment which makes for the ever-changing multiplier applied to earnings and dividends by the "market."

The succeeding chapters, "Observations of Special Value" and "The Grand Strategy of Stock Trading" are replete with investment truisms and inspired flashes of rare intuition concerning the quirks of psychology which induce most traders to generally do the wrong thing at the right time, or the reverse. Mr. Granville's observations on these phenomena are lucid, persuasive and unhedged. There seems to be little to which any market technician could take exception, other than the somewhat blythe assumption by the author that the lay investor will bring himself to do the correct thing even though he is taught what is dictated by any given set of circumstances. The experience of most market teachers has long proved the difficulty of espousing opinions at variance with those of the majority. And only by such mirror-image reaction can real investment success be achieved.

However, the author does make an extremely good try at bringing the order of rational logic to the perplexed cross currents of the market, and to the diverse opinions concerning it. This reviewer—who works in the adjoining office — can attest that Mr. Granville daily practices exactly what he has so eloquently preached.

In conclusion, and in explanation of the opening paragraph comment as to the potential great value of this book to the amateur investor, a few personal observations may be pardoned. It has long been the contention of most professionals (and the conviction is being strengthened by the increasing perplexities of business life in these troubled times) that do-it-yourself investing for profit is as defunct as low taxes. The immense flow of fact and fiction that must be assimilated or rejected prior to the formulation of sound policy seemingly calls for the coordinated efforts of trained teams of specialists rather than the casual attentions of even a dedicated part-time practitioner. The consequences of mail order security selection usually end up about as satisfactorily as would performing one's own appendectomy.

So, for those who read Mr. Granville's book, and can't understand everything in it, or are too busy or too lazy to keep the detailed record day by day, or don't have the fortitude to follow the figures when all the world seems to be rushing in the *opposite* direction: You had better decide to team up with someone who can!

* * *

WALL STREET IN WORDS AND PICTURES. By Ralph G. Martin & Morton D. Stone. Chicago, New York, San Francisco: Rand McNally & Co. 223 oversized pages. $7.50.

In the neo-classic tradition of diamonds being a girl's best friend, the authors of "Money Money Money" have clearly shown, in simple words and excellent pictures that the public's best friend may indeed be found in the money marts of Wall Street.

In what might be described as an "illustrated learner's permit to investing," this book's 223 pages contain a wealth of information for many a potential investor who prefers to sandwich solid text with illustrations. The fact that the picture newspaper's technique has been used to explain (in the words of Keith Funston, president of the New York Stock Exchange) "the people's capitalism," in no way detracts from the informative and factual explanation of a most serious subject. Indeed, in a day and age when pictures are so widely accepted as part of our literary genre, why shouldn't the technique be applied to explaining a somewhat complicated financial subject?; it has!

Alive with Wall Street's peculiar jargon (which is clearly explained), the authors keep the text alive with such insight-jocular expressions as "the coffee that keeps me awake is in the warehouse"—this being the observation of a commodity coffee speculator. Commodity markets have been aptly termed "The Calculated Risk." Activities on the two principal stock exchanges are, of course, explained in detail.

As space limitations preclude mention of the scores of Wall Street banks and investment firms, the authors freely admit that they concentrated on a few; and the few that get special treatment are: Merrill Lynch, Pierce, Fenner and Smith—"We the People;" Bache & Co.—"The Stamp of Quality;" and E. F. Hutton & Co., whose General Partner Gerald M. Loeb, in 14 pages of pictures and text, is called "Millionaires' Money Manager." Mr. Loeb is a member of *The New York Society of Security Analysts.* Chase Manhattan comes in for a detailed treatment under the heading of "The Bankers' Bank."

And for the more sophisticated investor, the authors have included information on the seldom talked about "special situations," with their camera focused on David J. Greene who "was one of the lonely ones who predicted in a detailed report that AT&T would split its stock—and backed it with his cash investment."

Allen & Co., which is relatively little known even on *the* Street, is given detailed treatment as the "Money Builders." Ranking "among the top three of the richest houses in total capital on Wall Street," this firm is described as one "that has no direct contact with the average public customers, has no ticker in its office, belongs to none of the stock exchanges, has no regional offices, no private cables." Still, it is "a company with such a small margin of error, with such a strong smell of success, that it sells out any issue it sponsors." A firm of only 70 people, most of them are described as millionaires.

Here's a book (and we regret that a copy was not available sooner for review in our November-December issue) that would make an excellent gift—any time however,—for teenagers *and* their parents, whether or not they are investment-conscious. Finally, the book's impact might be summed up by a single quotation:

"There's always excitement about the movement of money, even when it isn't my own." —W. B.

BOSTON EDISON COMPANY

Preferred Dividend

A quarterly dividend of $1.06 per share has been declared payable on the first day of February 1961 to stockholders of record at the close of business on January 10, 1961 of the Company's Cumulative Preferred Stock, 4.25% Series.

Preferred Dividend

A quarterly dividend of $1.19 per share has been declared payable on the first day of February 1961 to stockholders of record at the close of business on January 10, 1961 of the Company's Cumulative Preferred Stock, 4.78% Series.

Common Dividend No. 287

A quarterly dividend of 75 cents per share on the Common Stock of the Company has been declared payable on the first day of February 1961 to stockholders of record at the close of business on January 10, 1961.

Checks will be mailed from Old Colony Trust Company, Boston.

ALBERT C. McMENIMEN
Treasurer

Boston, December 22, 1960

STOCK MARKET PROFITS FOR THE SOPHISTICATED INVESTOR. Narrated by Burton Crane. ABC Paramount Full Coverage Fidelity Broadcast Record. Three long-playing 33-speed records, six sides.

Reviewed by FRANCES HAIDT

These records are an unusual and interesting adaptation of Burton Crane's already successful book *The Sophisticated Investor.* Sound, in conjunction with the printed word is a modern, approved and effective educational medium. The inside leaves of the decorative album contain charts and tables which are to be followed when listening to the records. References supplement the basic lesson.

As with his book, Mr. Crane, stock market columnist of The New York Times, targets the record at the person of moderate means who, in his efforts to invest or speculate in the market, has become more than slightly confused and consequently does all the wrong things: hesitates to take losses, averages down, and buys "respectability" (stocks in the biggest companies even though they may be going downhill in earnings).

Mr. Crane believes that one can learn from experience — that "history does have a habit of repeating itself in the stock market—and the sophisticated manager . . . can at least make sure that he is not going against them." He also attempts to tell how to pick "lively stocks;" how to measure "growth potential;" and how to handle the day-to-day tactics of the speculative market.

Record 1 concerns itself primarily with the need for an investment policy and techniques of market transactions. Record 2 discusses the effects of compound interest on market investment and the recent rapid institutionalization of investment. Record 3 discusses four methods of picking growth stocks, favoring that of Samuel L. Stedman. Record 4 reviews the relation of the money market to that of securities. Record 5 suggests that it is better to "buy in stock that has just made a new high," than a stock that seems to be at absolute bottom. Record 6 is devoted to charts, conventional and point and figure.

To the sophisticated Financial Analyst, Mr. Crane at times seems to be instructing the investor on how to second guess the expert. We would be inclined to say to a prospective investor *choose a professional broker*. Since so many customers-men today are as unsophisticated as their customers, this is not so easy to do. Mr. Crane's "rules-of-thumb or experience" can prove valuable in limiting losses and maximizing profits. This record should indeed prove a worthy instructor for the average investor, and these two hours playing time help to develop a coherent investment philosophy.

* * *

Investor's Diary & Almanac 1961. Published by Investors Intelligence, Larchmont, N. Y. $7.50.

In these busy times, with the proliferation of record keeping a "must" for the tax collector, the maintenance of day-to-day financial records is no longer just a pleasant chore for the prosperous.

While the use of this *Almanac* will not make the onset of April 15th a pleasure, it will ease the last-minute anguish of digging through masses of records for necessary details prior to filing an accurate return.

Attractively bound, the *Investor's Diary* is a day-to-day desk calendar, appropriately ruled to provide space for daily purchases and sales; stocks to watch; six-month holding periods; and dividend dates and the like.

Designed as an ideal New Year's gift for any investor, the back cover page is guaranteed to cause an inferiority complex in all but the most successful. It traces the monthly wanderings of the Dow-Jones Average from 1910's low of $73.62 to the present. —D. H. R.

* * *

Top Management Handbook. H. B. Maynard, Editor-in-Chief. New York: McGraw-Hill Book Co. 1,236 pages. $17.50.

Reviewed by Frances Haidt

Top Management Handbook is not easy to handle, as it weighs five pounds; its dimensions are 6 x 9 x 2, and it runs over one thousand pages with 60 authors. Its size and contents are seemingly more fitted for the desks of giant corporate managers than the libraries of Financial Analysts.

Based on a smaller study in 1957 by the Association for Consulting Management Engineers, Dr. H. B. Maynard, as editor-in-chief, attempts to bring together (in one place for easy reference) the fundamentals and principles of management with case material from the experience and practice of representative managers on each organizational level.

Management is defined as the planning, guiding, directing and controlling of the activities of other people. It is conceived as a separate and distinct function, not to be confused with such technical or procedural work as industrial engineering or cost accounting. Whether the function be production, research, marketing, finance, personnel, etc., the management thereof is a three-step process: (1) establish objectives; (2) direct their attainment; and (3) increase results.

The question as to whether any phase of the social sciences is indeed a science remains unanswered. Despite efforts to chart, systematize, outline and generalize, each writer in effect is forced to conclude that management, in the last analysis, is an art.

Thomas J. Watson, Jr., president of IBM, pertinently summarized it best when he wrote that "to a great extent, the degree of success realized . . . will depend upon innovation . . . at the business managerial level."

Of greater interest to the Financial Analyst is the collective portrait of typical top management. The personalities and predilections of this representative group of American businessmen is revealed by the brief biographical sketch preceding each chapter and the personal touch in the style and type of experiences which they detail.

Unfortunately, there does not appear to be any correlation between the expertness of a manager in his special area and the success of the company as measured in the securities market. Only a little more than half of the companies represented in this cross-section of American enterprise are publicly held. This reviewer found that the chapters which read best, were by officers of companies whose stocks are current-

CONSOLIDATED NATURAL GAS COMPANY

30 Rockefeller Plaza
New York 20, N. Y.

Dividend No. 52

The Board of Directors has this day declared a regular quarterly dividend of Fifty-Seven and One-Half Cents (57½¢) per share on the capital stock of the Company, payable February 15, 1961 to stockholders of record at the close of business January 16, 1961.

John Miller, Secretary
December 14, 1960

DIAMOND NATIONAL CORPORATION

79th CONSECUTIVE YEAR OF DIVIDENDS

The Board of Directors of Diamond National Corporation on December 8, 1960, declared a quarterly dividend of 37½c per share on the $1.50 Cumulative Preferred Stock. At the same meeting the Board also declared a quarterly dividend of 40c per share on the Common Stock. Both dividends are payable February 1, 1961 to stockholders of record January 6, 1961.

ALFRED H. WILHELM
Secretary

PULP PRODUCTS · PACKAGING & ADVERTISING MATERIALS · LUMBER · MATCHES · WOODENWARE

ly favored (IBM, AMF, McCall, Borden, Sun-Chemical, etc.). In fact, Mr. Burgess's discussion of AMF's philosophy of growth through acquisition financed by pinsetter earnings was most illuminating.

Owen Cheatham, chairman of Georgia Pacific, in his chapter of "Top Managements' Responsibility for Finance and Control," pays due respect to our Financial Analyst Societies and the necessity of keeping potential sources of funds informed even when monies are not currently being solicited.

Perhaps the most discouraging or disturbing aspect of this book from the Financial Analyst's point of view, is the emphasis on the professional manager who does not have to be an owner, or even a partial owner of the company he manages. Nor do these professionals recognize ownership sharing as an *incentive*. In the opinion of this Financial Analyst, it is essential that top management hold stock and be concerned with the appreciation of his own capital. This identification with shareholder interests is an essential incentive and responsibility of top management.

GARDNER DENVER

GARDNER-DENVER Since 1859

107th CONSECUTIVE DIVIDEND

ON COMMON STOCK

A quarterly dividend of $.50 per share on the common stock of Gardner-Denver Company has been declared by the Board of Directors of the company, payable March 1, 1961, to stockholders of record at the close of business on Feb. 8, 1961.

Quincy, Illinois
Dec. 1, 1960

O. C. Knapheide, Jr.
Secretary

In Memoriam

VICTOR R. SCHACHTEL

Victor R. Schachtel, 62, a senior Analyst with Paine, Weber, Jackson & Curtis, and a member of The New York Society of Security Analysts, died of a heart attack at his Middletown, N. J., home. He was associated with investments for approximately 40 years.

Mr. Schachtel was an associate member of the New York Stock Exchange. He is survived by his wife, Mrs. Marie Schachtel and a son, Lawrence V. Schachtel.

* * *

SERGE B. JURENEV

Serge B. Jurenev, 60, chief economist, assistant to the president, and a director of Continental Oil Co., died in the Glen Cove, N. Y., hospital.

Mr. Jurenev was a Security Analyst and economist with J. P. Morgan & Co., now the Morgan Guaranty Trust Co. of New York, for 16 years. He was a member of The New York Society of Security Analysts, and contributed articles for several financial and industrial publications. His widow, Mrs. Anna Jurenev, survives.

* * *

MARSHALL DUNN

Marshall Dunn, 67, railroad securities Analyst with Wood, Struthers & Co., died in Connecticut's Norwalk Hospital. Mr. Dunn, for a period of three years, worked in China and wrote two books which were used in Chinese schools, and helped defend Shanghai's Foreign Settlement during an uprising of rebellious soldiers.

Prior to his Wood, Struthers & Co., affiliation Mr. Dunn was president of Homer & Co., a stock and bond firm. He was a member of The New York Society of Security Analysts, and president of that Society in 1941-42.

Surviving are his wife, the former Elsie McCormick and a brother, Dr. Halbert Dunn of Washington, D. C.

* * *

FREDERICK R. DARROW

Frederick R. Darrow, 55, assistant vice president and industrial Analyst with The First Boston Corp., died at St. Clair's Hospital in Denville, N. J. Prior to his last affiliation, Mr. Darrow was with the Mellon National Bank and Trust Co. in Pittsburgh.

He is survived by his wife, Mrs. Dorothy Darrow, and three daughters, Emily, Susan and Carol Ann.

* * *

JAMES H. SCHURMAN

James H. Schurman, 33, a Financial Analyst with Molson & Co., Montreal, died suddenly of a blood infection. Mr. Schurman took an active part in activities of The Montreal Institute of Investment Analysts, and as such became additionally well known to National Federation members when the annual Convention was held in Montreal in 1959.

Prior to being affiliated with Molson, Mr. Schurman was employed by McLean Budden Ltd., a leading Montreal investment firm. He is survived by his wife, Cecilia and two daughters.

* * *

ROBERT L. SANDIFER

Robert Lee Sandifer, 55, a member of The Los Angeles Society of Security Analysts, died Nov. 19 at Los Angeles' Methodist Hospital.

Mr. Sandifer, executive financial editor of the Los Angeles Times, was a former trader on the floor of the Los Angeles Stock Exchange. He had served as president of the Los Angeles Financial Writers Association.

Surviving are his widow, the former Luzelle V. Zimmer; one daughter, Mrs. Barbara McKercher; two sons, Robert L. Sandifer, Jr., and Richard Edward; two brothers; four sisters; and his mother.

* * *

WALTER R. BEIRNE

Walter R. Beirne, 35, a member of The Richmond Society of Financial Analysts, died Dec. 27. He was associated with J. C. Wheat & Co., Richmond.

An Air Force lieutenant in World War II, Mr. Beirne leaves his wife, Mrs. Judith Spellman Beirne; two sons, Walter R. Beirne, Jr., and Clark S. Beirne; a daughter, Katherine Marie Beirne; his mother, Mrs. Milton J. Beirne; a brother, John B. Beirne; and a sister, Mrs. George K. Brooks, Jr., all of Richmond.

* * *

PARKER BLAIR

Parker Blair, 70, Shearson, Hammill & Co., died Oct. 14. He was a member of The Investment Analysts Society of Chicago. Mr. Blair previously had been with Winthrop, Mitchell & Co., which was merged with Shearson, Hammill in 1941.

* * *

ALEXANDER B. CARVER

Alexander Burton Carver, 64, a retired stockbroker, died in Connecticut's Stamford Hospital. In 1928, Mr. Carver left the New York foreign exchange firm of Orr, Carver & Van Dyne, of which he was a founder, and purchased a seat on the New York Stock Exchange.

He is survived by his wife, the former Eugenie Edmonds; a daughter, Mrs. Alvaro Espinosa; two sons, Alexander and Christopher; three sisters and six grandchildren.

Letters

We're Working on It

Editor:

I wish that The Financial Analysts Journal had in its make-up a short summary of each article similar to that in the front of Fortune ("Fortune's Wheel").

William Shallow
Fairfield, Conn.

(We've been working on this idea, but right now we're confronted with certain printing problems that make it impossible. By another year we hope that we'll be in a position to follow your excellent suggestion.—Ed.).

* * *

For the Record

Editor:

In regard to your editorial, "San Francisco Analysts to Probe Hawaiian Economy" in the November-December issue, we would like to correct a couple of erroneous conclusions concerning Matson Lines.

The editorial says that "with tourists increasingly favoring planes over steamships, the Matson Line's passenger volume was decimated in the ensuing decade, and as a result—with passenger travel greatly reduced—Matson contracted its passenger services sharply, and currently is concentrating its shipping efforts in developing lucrative freight traffic."

The fact is that Matson has added three new passenger liners to its Pacific fleet since 1956. They are the Mariposa and Monterey in Pacific Coast-South Pacific service, and the Matsonia, which joined the flagship Lurline in Pacific Coast-Hawaii service in June, 1957. This restored the Matson passenger ship fleet to its prewar complement of four "white ships."

In addition, the total number of sailings each year has been increased by 25% over the prewar period. And to demonstrate Matson's faith in the future of Pacific passenger liners, the company will spend $1,800,000 in advertising and promoting its services in 1961.

The editorial also said that, "Within the past decade, and despite rising tourist traffic, Matson (for financial reasons solely) sold all of its hotel interests to the Sheraton Corporation." The fact is that Matson, launched originally as a steamship company, went into the hotel business to provide accommodations for steamship passengers arriving in increasing numbers in Hawaii. In recent years, as more and more new hotels were built in Honolulu, Matson felt it no longer necessary to operate hotels since the company's primary interest was operating steamships. So the four Matson hotels were sold to Sheraton and Matson has concentrated since on steamship operations—both passenger and freight—as the company has done since it was started by the late Captain Matson more than 77 years ago.

Thank you for giving us the opportunity to set the record straight.

Wm. F. Meeske, Vice President
Passenger Division
Matson Navigation Co.

* * *

Hawaiian Memories

Editor:

Your editorial in the last issue about the San Francisco Analysts' plans to visit Hawaii and study that state's economy was most interesting. I lived in Hawaii for many years. Thank you for some pleasant memories of the Islands.

Monroe McGuan, Chicago, Ill.

* * *

We Stand Corrected

Editor:

I would like to call your attention to a brief comment on page 43 of the November-December issue. At the bottom of page 43 reference is made to certain types of options. The definition given there to "Spreads" is somewhat ambiguous. Both Spreads and Straddles give the customer or holder the right to both buy and/or sell at a pre-determined price during the life of the contracts. Since these combination options are really two distinct individual options, either one may be exercised without violating the right of the other.

Spreads are really Straddles which have been altered slightly at their inception. In the case of a Straddle which is a combination of one Put plus one Call, the contract price for each option is the same. Spreads differ in that they are combinations of Puts and Calls which have different contract prices. Usually the Call will have a contract price above the current market price when it is originated and the Put will have a lower than market price.

A Strip is another combination which breaks down into a Straddle with an extra Put. A Strap is the converse, a Straddle with an extra Call.

I have received your publication for the last three years and find it most interesting and informative. I look forward with interest to future issues.

Henry S. Kane
Rutgers University

* * *

(We're most happy to note that even our editorial fillers are read. For more detailed information about "Puts and Calls," etc., see our Jan.-Feb., 1960, issue which reviewed (Harold H. Hammer) a book on the subject.—Ed.).

FIFTEEN YEARS AGO IN THE JOURNAL

Investors will not find the Dow theory a satisfactory mechanical system for buying and selling securities. Admittedly, trading techniques applying the fundamental principles of the Dow theory have been developed which have stood the test of time. And many traders intelligent enough to temper principles with judgment will continue to make worthwhile profits following the Dow theory — but not investors who take a mechanical point of view and buy and sell stocks only when major turning points are confirmed by the Averages.

I cannot believe that Charles H. Dow, or his disciple, William Peter Hamilton, would countenance much of what is written and done in the name of the Dow theory. These men were too realistic! They were trying to develop a systematic logical approach for analyzing the movements of the stock market and their implications, both in terms of the probable future trend and as a barometer of business.

When Mr. Hamilton wrote, "Prosperity will drive men to excess, and repentance for the consequence of those excesses will produce a corresponding depression," he was propounding principles for sound judgment. His statement, "The tree does not grow to the sky," suggests an attitude of increased caution as stock prices advance. But when this wisdom is thrown to the winds and a mechanical theory of investment is embraced, the investor makes a mistake and is in for trouble.

—William F. Edwards

* * *

The economic upheavals of the interwar years had certain basic effects upon the processes of security selection and investment management. One was elevation of the Security Analyst to a professional status. He is much nearer to being a technician and can be called that now. During the past two decades particularly, a mass of statistical and financial information has become available from government and other sources. As a consequence, the appraisal of securities is increasingly scientific; and that fact is partially responsible for the gradual elimination of some of the gambling aspects of stock trading. This study [the author's 1946 article] attempts to prove, or at least to indicate, that in the past five years the most profitable type of investment operation was founded on careful security selection conducted by this better recognized professional group.

—Milan D. Popovic

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Compiled by FRANCIS J. CALKINS, *Professor of Finance, Marquette University*

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'Prestigious' is the Word For New York Analysts

In a special report on "How to Boost Stocks," in which Time magazine's year-end-issue adds "Means Are Many, Some Are Honest," Financial Analysts in general are given a boost, the New York Society, in particular, is cited. Time says:

"A month ago [December 9th to be exact] Lionel President John Medaris was scheduled to speak before the prestigious New York Society of Security Analysts; and word went around that there he would reveal that Missile Expert Werner von Braun was joining Lionel. Next day Lionel was the second most heavily traded stock on the Exchange, jumped two points. Medaris had nothing to say about Von Braun, except to deny the rumor."

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REGULAR QUARTERLY DIVIDEND

The Board of Directors has declared this day
COMMON STOCK DIVIDEND NO. 106
This is a regular quarterly dividend of
27½¢
PER SHARE
Payable on Feb. 15, 1961
to holders of record at close
of business, Jan. 20, 1961
MILTON C. BALDRIDGE
SECRETARY
Jan. 5, 1961
THE COLUMBIA GAS SYSTEM, INC.

expanding in fertilizers . . . a growth industry

Fertilizer consumption in the United States is up 88% in 15 years—from 13,466,000 to 25,313,000 tons.

In the same 15 years, consumption in the 16 central states increased almost 140%—from 4,607,000 to 11,009,000 tons. This is the primary market for National Distillers and Chemical Corporation's fertilizer chemicals—ammonia, nitrogen solutions and sulfuric and phosphoric acids manufactured at U. S. I. division plants in Illinois, Iowa and Kansas.

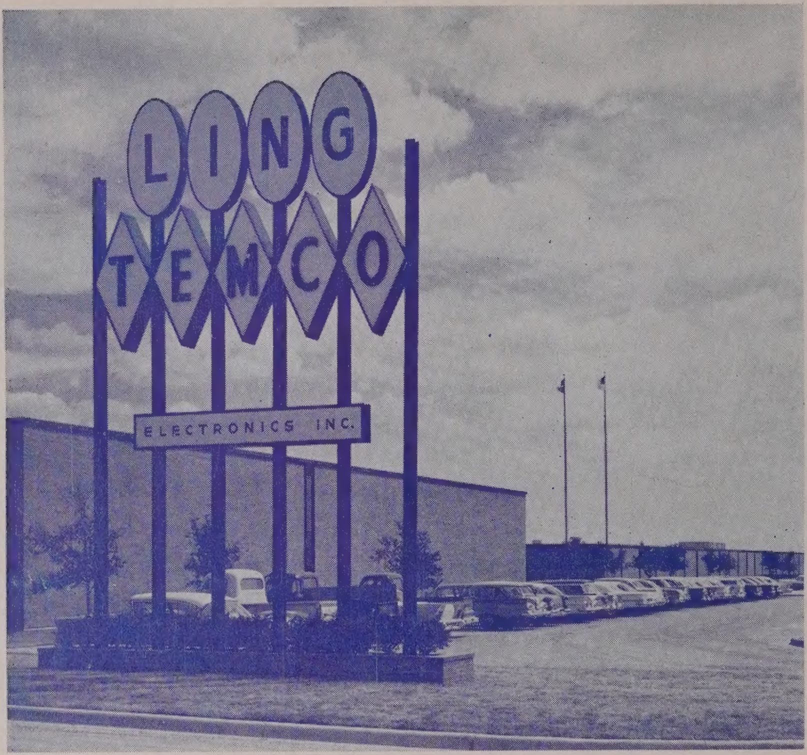
Now National has taken an important forward step in integrating its fertilizer operations by merger with Federal Chemical Company. Federal is a 76-year-old mixed fertilizer manufacturer with six modern plants in Kentucky, Tennessee, Illinois, Indiana and Ohio, heart of the mid-west farm belt.

Another recent National Distillers acquisition is Minnesota Liquid Fertilizer Company which distributes anhydrous ammonia through 32 stations in Minnesota.

National Distillers' progress in the expanding fertilizer field is part and parcel of its substantial growth in industrial chemicals, special metals and plastics.

N D | U.S.I. **NATIONAL DISTILLERS and CHEMICAL CORPORATION**
NEW YORK 16, N. Y.

THE COMPANY WITH THE FIVE INDUSTRY FUTURE
LIQUORS • INDUSTRIAL CHEMICALS • PLASTICS • FERTILIZER CHEMICALS • SPECIAL METALS



LING-TEMCO ELECTRONICS, INC.

. . a growing corporation, guided by a strong management team, is a supplier of vital systems and products

1. To the Department of Defense: the most powerful radio and radar transmitters in the world and the world's most powerful radio station, the "voice" of Polaris at Cutler, Maine — sonar equipment — radar transmitters, plotting and display systems being used in BMEWS — super power radar equipment used in Nike-Zeus anti-missile missile system — data collection and assimilation for missile base management — components of five other major missile programs — components of first line manned missile launching aerosystems including "skins" for the B-70 — major elements of the Air Force AN/USD-7 project and Iconorama systems for NORAD, SAC and JCS.

2. To the Industry: micromodular components — acoustical and vibrational testing systems for missile and jet aircraft producers — underwater speakers — electron tubes — telephonic and microwave communications devices — loud speakers for all purposes — missile carrying cases — specialized sound systems — the newest Voice of America radio station — linear accelerator for atomic research.

3. To the Consuming Public: closed circuit TV systems — hi-fi and stereo audio systems — electro-mechanical central control systems for coin-operated equipment — Voice of the Theater sound systems — portable broadcasting equipment — kitchen appliances — electronic testing equipment — refrigerating and air-conditioning equipment — vending machines.

Supporting Services: supporting these services and products are international sales and service organizations which insure customer satisfaction, plus research and engineering programs dedicated to the development of the new products needed for tomorrow's security and the consumer's rising standard of living.

THE LING-TEMCO GROUPS

Electronics Systems and Products

Continental Electronics Manufacturing Company
Fenske, Fedrick & Miller, Inc.
Ling Electronics Division
Temco Electronics Division
Altec-Lansing Corporation
Calidyne Company
Peerless Electrical Products
Micromodular Components Division
Electron Corporation
United Electronics
University Loudspeakers, Inc.

Missile and Aerospace Systems and Components

Temco Electronics & Missile Company
Missile & Aircraft Division
Overhaul & Aerosystems Division

Electro-Mechanical Commercial and Consumer Products

Temco Industrial Division
Ed Friedrich, Inc.
Friedrich Refrigerators, Inc.

Supporting Services

Research Division
Altec Service Company
Ling-Altec Export Corporation
Temco International Corporation

LING-TEMCO ELECTRONICS, INC.

P. O. BOX 5003, DALLAS 22, TEXAS